

# ROM

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Magazine of the Royal Ontario Museum



THE BAT CAVE: It's bigger, better, and scarier than before / How to spot a fake: Forgers have done big business from ancient times to today / Beetles on the payroll: What happens inside the ROM's live bug room / Experimental archaeology: Researchers learn from re-living history / Plus: JAMES CHATTO on unsavoury food fakes / MARK KINGWELL on what's fair and foul in fakery

volume 42:number 3  
2009 winter



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Dinner for 200?  
What's on the menu  
in the ROM's live  
bug room.

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**Natural history** (main image): Jamaican fruit-eating bat in flight carrying a solanum berry.  
Photo: ©Merlin D. Tuttle, Bat Conservation International, [www.batcon.org](http://www.batcon.org)

**World culture:** Beaded watch pocket. Iroquois, 19th century. ROM 991.141.2  
Gift of Mrs. Flavia Redelmeier.  
Photo: Brian Boyle, ROM

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# Our Contributors



**Paul Denis**  
CURATOR

Since 1981, Denis ("When Art Imitates Art") has been fascinated with his work in the ROM's Greek and Roman collection—the research, exhibitions, acquisitions, travel, and most of all, collaborating with colleagues. His interest and research in Byzantium led to several major acquisitions and gifts of Byzantine artifacts, which now number some 400. What Denis finds especially intriguing about Byzantine art is how Classical art motifs were adapted, modified, and interpreted to serve the needs of the Orthodox Church. He's worked on the Greek, Etruscan, and Roman Gallery; the Tanenbaum Gallery of Byzantine Art; and the Leventis Gallery of Ancient Cyprus and the Bronze Age Aegean.

**Describe your work on the exhibition *Fakes and Forgeries*.** Meetings with the RCMP, Bank of Canada, Microsoft, CSA Group, and intellectual property lawyers were a real eye-opener on how extensive the plague of counterfeit merchandise is today and the impact it has on the economy here and in the source countries. We hope that this message in the exhibition will make Canadians more aware of what they are buying.



**Lee-Anne Jack**  
MANAGING EDITOR,  
ROM MAGAZINE

Jack ("Beetle Mania") has been managing editor of the ROM's magazine since 1999, and has had as little experience with bugs as possible (though for sheer horror, the giant Madagascar hissing cockroaches on display in the Hands-on Biodiversity Gallery can't be beat). She has previously written about Canadian missionary Bishop White and the ROM mummy Djedmaatesank.

**What is your most memorable experience with forgeries?** On a recent trip to Mexico, I brought home a bottle of what was labelled pure vanilla extract. I was dismayed to discover it wasn't my favourite baking additive at all, but an odd-tasting clear liquid. It turns out that fake vanilla abounds in Los Cabos, synthetics containing up to 25 percent alcohol (compared to about 2 percent in the real thing) or even coumarin, a chemical compound widely banned as a food additive because of potential toxicity to the liver.



**Robert Mason**  
MATERIAL SCIENTIST

Mason ("Re-living History") is an archaeologist with the ROM and the University of Toronto, with degrees from Toronto and Oxford. His areas of expertise include technology and materials of artifacts made from the earliest times until the industrial revolution with a particular focus on the medieval period (roughly 500–1500 CE) and the Middle East.

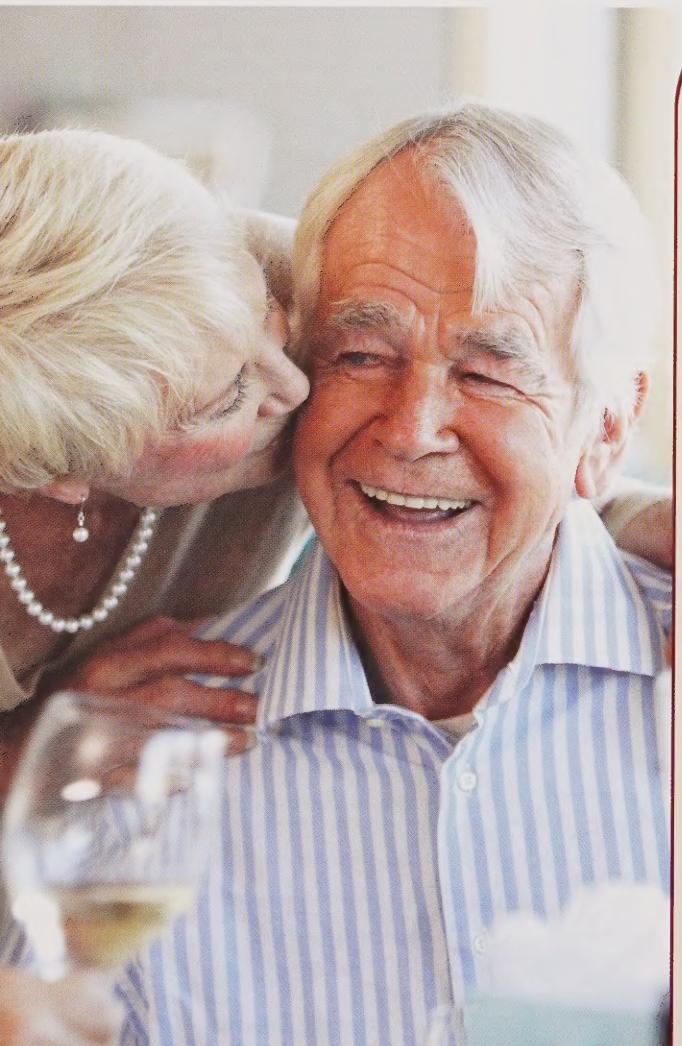
**What was your most memorable experience with forgeries?** A man brought two small daggers to an ID clinic, convinced they were of great antiquity. I could see instantly that they were fakes, but didn't want to hurt his feelings. Using a microscope, I showed him how the work on the brass hilts was made with modern machinery (you could still smell the machine oil). I pointed out that the "precious gems" were plastic and the blades were of a shape that made them useful only as letter-openers. The coup de grace was a mark on one of the blades: "Made in Lebanon." As I explained, the man became progressively crestfallen. His wife, though, became increasingly triumphant—she evidently had never believed they were real.



**Janet Waddington**  
ASSISTANT CURATOR

Waddington ("When is a Fossil Not a Fossil") started at the ROM in 1971, charged with the daunting task of computerizing the invertebrate fossil records. Over the years, she has also supervised the 1981 collections move and reorganization, helped plan the now-demolished Dynamic Earth Gallery, and most recently coordinated the James and Louise Temerty Galleries of the Age of Dinosaurs. Her research interests include the study of a new 425-million-year-old species of fossil scorpion from the Silurian of the Bruce Peninsula.

**What was your most memorable experience with forgeries?** I recall with amusement the time we were deliberately trying to buy a forgery at the Tucson Gem and Mineral Show for our teaching collection. But all the obviously doctored examples turned out to be more expensive than the good specimens offered by a reputable dealer! In an out-of-the-way venue we felt sure we would find a shady deal. The proprietor kept dropping his price before we had even made a selection. We finally purchased a fine real trilobite that now graces our reference collection.



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# A Letter from our Director and CEO

## The Essence of Originality: Do We Cast Aspersions on Copies?

### Impishly, I once posed the question in print:

"If you could make a perfect copy of a great work of art, would the copy not be as compelling as the original?"

Take a painting by Matisse for example—*Open Window* (1905). In a perfect copy of this lively work, are the flowerpots on the sill not as wonderfully abstracted and coloured as the original? Are the inspiration, ideas, and sensibilities in this painting—in sum, its content—not as inspired as in the original? If yes, why is the original worth millions in the marketplace, and the copy not much?

Does the value of a work lie in the originality of its ideas and execution, or overwhelmingly in the fact of its singularity as the product of the physical artist himself?

This question might seem a little silly if it were not for the phenomenon of bronze sculptures. Unlike sculptures carved in stone, bronzes are cast from a mould, which is often made of plaster. Logically, the plaster is the original, and the bronze is an excellent copy.

Thus, in the Art Gallery of Ontario's Henry Moore Sculpture Centre, we see many wonderful forms described as "original plaster" made in the artist's studio, gifts of the artist. We also see a few pieces described as "plaster cast"—presumably of an original plaster. And we see a number of bronzes, such as "Horse," cast in foundries from original plasters. The bronzes are also regarded as originals.

But there is more.

"Horse" is labelled 1/7. In other words, there are seven bronze horses made from the same original plaster cast. Each is regarded as original, and each presumably brings as much joy to the viewer as any of the others, or of the original plaster itself. Most of Moore's major bronzes are one of a numbered series, like lithographs.



Bronzes, too, come in limited editions. The replication of sculpture in this way is regulated by various authorities—governments, foundations, and trusts with copyright claims to the "original." So France, for example, says that only 12 bronze copies can be made from an original plaster to be regarded as "authentic" or original in themselves. The 13th copy—from the same original plaster—by decree is not authentic.

The same dynamics apply to trusts and foundations responsible for the sculptural works of deceased artists—where authorized "originals" can be made even after their deaths. The rationale may be quality, or it may be scarcity in the service of price. The fact of replication is not in dispute.

So the pesky intellectual question about the status of perfect copies has a little more life than may be initially apparent. (Consider photographs.)

The fact that Matisse went through the creative process directly with the original is offered as the reason why the perfect copy is almost worthless in comparison. Propinquity to the process determines the value. Perhaps this dismisses the content too easily, or maybe our best copies are still too clumsy to sustain the question.

Fakes and forgeries are fascinating for the skills that go into making and selling them, but "original copies" have their fascinations too.

A handwritten signature in black ink that reads "W Thorsell".

**WILLIAM THORSELL**  
DIRECTOR AND CEO

Fakes and Forgeries: Yesterday and Today  
opens at the ROM in January 2010.



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# Exhibitions and gallery openings

## In the Spotlight

January 2010 **Feature Exhibition**

### **NEW** Fakes and Forgeries: Yesterday and Today

Counterfeit currency has been a problem in societies since the origin of money 2,500 years ago. Today central banks around the world wage an unending battle against counterfeiters to maintain the integrity of their bank notes. Most counterfeit bills are produced and distributed by organized crime to finance other illegal activities, though individual counterfeiters also try their hand at forging notes, hoping that their victims will not look too closely. Even a bad fake can pass as genuine if no one gives it a second look. And if you accept a fake bill, you're stuck—you won't be reimbursed, and it's illegal to pass it on.

The forgery of art works has been going on for just as long and every museum has a few fakes in its collections. In this ROM-developed exhibition, forged objects ranging from Egyptian and Hellenic antiquities to Canal Street knock-offs and fossil animals to pirated software and Canadian bank notes are placed next to their real counterparts and the differences are explained. The fascinating science behind detection is also described, revealing the techniques and tools that ROM experts use to detect forgeries.

Presenting Sponsor:  
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Opening February 27, 2010 **Gallery Opening**  
Philosophers' Walk Wing, Level 2

### **NEW** The Bat Cave

It's bigger, better, and scarier than before!

Created by an underground river, Jamaica's St. Clair Cave is one of the island's most notable bat roosts, home to 10 different species of bats. The famed cave was expertly re-created at the ROM, opening in 1988, and has been a perennial favourite with families ever since. The newly revamped Bat Cave, opening February 27, 2010, is larger, more realistic—and scarier—than before. Many more bats are in flight and roosting in the hollows of the new cave along with additional kinds of cave dwellers. An enhanced light-and-sound show complete with changing air currents and realistic underfoot terrain brings the cave to life. For the curious spelunker, a field guide details each of the species. Bring the family to brave the new cave—if you dare!

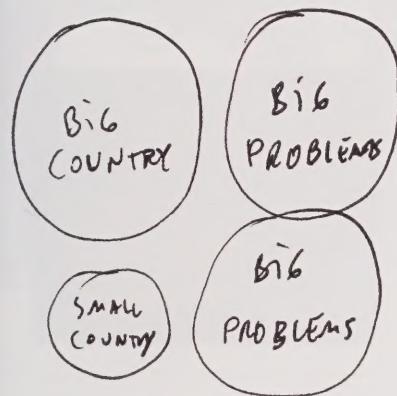
Until July 4, 2010 **Ongoing Exhibition**

Herman Herzog Levy Gallery, part of the Asian Suite of Galleries,  
Philosophers' Walk Wing, Level 1

# East Asian Paintings & Prints: Recent Acquisitions

In the art world, contemporary Korean artist Suh Se-ok's consistently black ink-only works are considered both painting and calligraphy. He writes his sparse marks on handmade Korean paper, and in the impressive 1995 work *People*, recently acquired by the ROM, he uses the Chinese character *ren*, meaning people, as his point of departure. More than 40 additional works acquired by the ROM in the last 12 years are on display—all important paintings, calligraphies, and prints from Korea, China, and Japan.

Exhibit Sponsor:  Manulife Financial



Opening February 22, 2010

Roloff Beny Gallery,  
Michael Lee-Chin Crystal, Level 4

# Dan Perjovschi: Late News

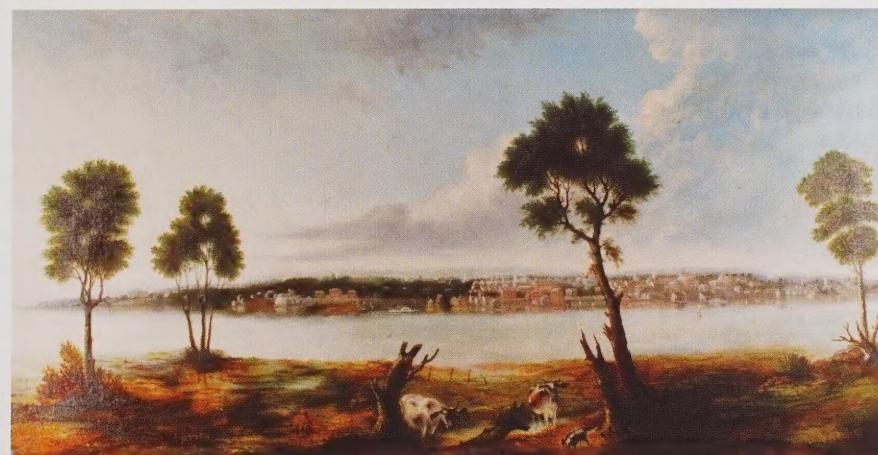
Romanian-born artist Dan Perjovschi's witty and incisive mix of drawing, cartoon, and graffiti will be penned in permanent marker directly on the walls of the ROM's Roloff Beny Gallery. From February 15 to 28, he and partner, Lia, will create the installation during public hours. This is his Canadian debut.

Until January 17, 2010 **Ongoing Exhibition**

Wilson Canadian Heritage Room in the Sigmund Samuel Gallery of Canada,  
Weston Family Wing, Level 1

## Returned to Former Splendour

Across time, paintings can sustain all manner of damage: pigments and other components can break down or change colour, canvas can tear, even attempts at repair can be detrimental. This ROM-developed exhibit explores how one ROM conservator has used modern techniques to return three classic ROM paintings to their former splendour.



Opening December 19, 2009

## Opening December Gallery Opening

## Teck Suite of Galleries: Earth's Treasures, Weston Family Wing, Level 2

**NEW** **Gallery of  
Gems and Gold**

Half of all the world's known gold reserves are found in South Africa, but Canada is one of several other nations—Russia, Brazil, the US, and Australia—that also have large deposits of gold. There has been a gold strike in almost every province and territory, and today Canada ranks among the top 10 gold producers in the world, yielding several million ounces annually.

The ROM's dazzling new Gallery of Gems and Gold chronicles the story of gold and displays a case of spectacular gold specimens. Also on view are some 600 beautiful and rare gems, gem crystals, and jewellery from the ROM's collections, some of the finest gems and jewellery in Canada. Each case explores and illuminates a mineral according to common chemical make-up. There is a stunning variety of familiar precious stones—diamond, garnet, opal, and jade—as well as exotic gems. A gallery highlight is the famed 900-carat Light of the Desert, the largest faceted cerussite gem in the world.



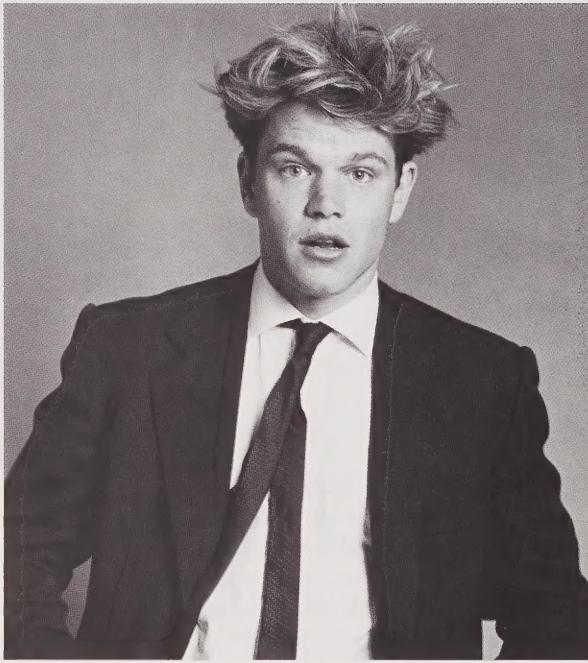
# What's On at the ROM

Until January 3, 2010  
**Ongoing Exhibition/ICC**

Roloff Beny Gallery,  
Michael Lee-Chin Crystal,  
Level 4

## Vanity Fair Portraits: Photographs 1913–2008

Celebrity, according to American historian Daniel Boorstin, is “as characteristic of our culture and our century as was the divinity of the Greek gods in the 6th century BC.” *Vanity Fair* magazine has been at the centre of much of that celebrity. On display at the ROM, the only Canadian venue for the show, are 150 pieces of *Vanity Fair*’s portrait photography—a compelling who’s who of the last century.



This exhibition is a collaboration between the National Portrait Gallery, London, and *Vanity Fair* Editor, Graydon Carter. *Vanity Fair* is a registered trademark of Advance Magazine Publishing Inc.

Presented by: **the Bay**

Supporting Sponsor: Moira and Alfredo Romano  
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### Last Chance

Until January 3, 2010

**Ongoing Exhibition**

Weston Exhibition Hall,  
Michael Lee-Chin Crystal, Level B2

### DEAD SEA SCROLLS: WORDS THAT CHANGED THE WORLD

Co-Chairs and Patrons: Mohammad Al Zaibak,  
Tony Gagliano, Jonas Prince, and Families

Lecture Patron: Anne Tanenbaum Family

Exhibit Patron: Blyth Academy

Government Partner: Ontario Cultural Attractions Fund

This exhibit was produced by the Royal Ontario Museum in collaboration with the Israel Antiquities Authority. The artifacts are on loan from the National Treasures of the Israel Antiquities Authority.

ISRAEL  
ANTIQUITIES  
AUTHORITY

Light in the exhibition  
will be dimmed to help  
preserve the fragile  
scrolls.



Until January 3, 2010  
**Ongoing Exhibition/ICC**

Centre Block, Level 3

### HAMRA ABBAS: READ

Supported by: Hal Jackman Foundation



Until January 3, 2010  
**Ongoing Exhibition/ICC**

Centre Block, Level 3

### JOSHUA NEUSTein: MARGINS Contemporary Art Unraveling the Dead Sea Scrolls

Presented by the ROM's Institute for  
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### Out of the Vaults

Until January 3, 2010

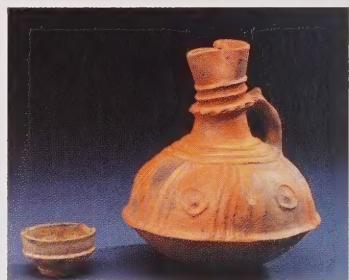
**Ongoing Exhibition**

Daphne Cockwell Gallery  
of Canada: First Peoples  
**SITTING BULL'S  
HEADDRESS**

Until spring 2010

**Ongoing Exhibiton**

Wirth Gallery of the Middle East,  
Rotation Display, Michael  
Lee-Chin Crystal, Level 3  
**COFFEE & SMOKES IN  
MEDIEVAL YEMEN**



Until March 21, 2010 **Ongoing Exhibition**

Feature Gallery,  
Hilary and Galen Weston Wing, Level 2

### Canadian Content: Portraits by Nigel Dickson

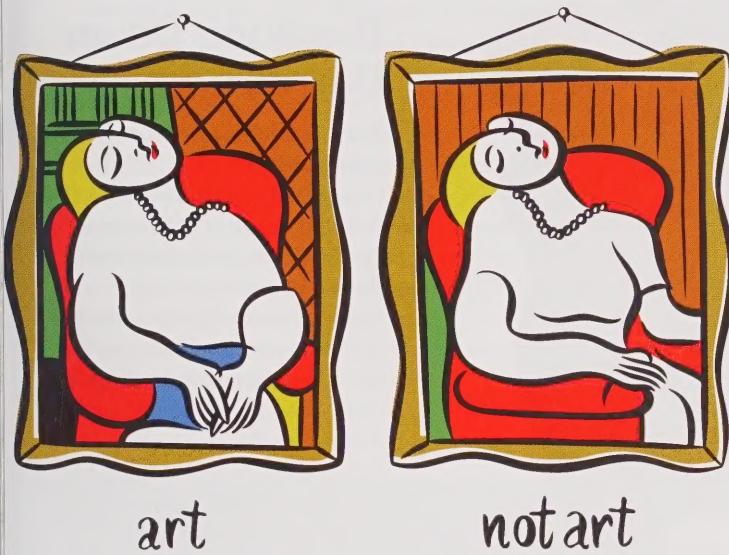
A complement to *Vanity Fair Portraits*, this show features more than 30 witty portraits of famous Canadians snapped by one of Canada's most acclaimed photographers, Nigel Dickson.



# How Fake Can We Be?

A philosopher counts the ways

BY MARK KINGWELL



**All forgeries are fakes, but not all fakes are forgeries.** In fact, there are so many ways of being fake that it's a wonder we manage to navigate a world so rich in falsehood and illusion.

A smile or a gesture is fake when it is insincere. A person is fake when pretentious or histrionic, a poseur or a pseud. Salinger's Holden Caulfield was neatly comprehensive: for him, just about everyone was phony because conventional or bourgeois.

A mirage in the desert is a fake of the eyes, a hallucination one of the mind. A literary or artistic hoax is fakery, creating a non-existent author or artist. But this is different from the fakery of *trompe l'oeil* or a photoshopped picture—two kinds of artistic illusions that are themselves distinct kinds of faking, as are faked-up Doric columns on a suburban house.

A quarterback fakes the run when he executes a play-action pass. A pitcher fakes a fastball when he throws a changeup—but a curveball, while deceptive, is not fake. The bogus hero, lauded for something he did not do, is yet another species of fake, though not as distressing as the untrained chancer who poses as a doctor, or the bigamist who fakes his own death.

Loose philosophy and hackneyed music will earn the judgment of fakery. But this is not the same as massaging experimental results, plagiarizing a paper, or creating false citations—three more ways to fake. And strangely enough, at a certain point *faking it* becomes admirable or at least cool: casually fabricating “expert” conversation about art or politics.

So what distinguishes art forgeries among these many ways of seeming false? They have a deliberate intention to deceive—not shared with all fakes—combined with the passing off of a worthless object as some valuable original. Forged artworks are in the same category as celebrity impersonators, androids, paste pearls, retro restaurants, pleather, and Canal Street designer knock-offs.

As these last examples hint, sometimes fakery can become weirdly desirable: oversized fake pearls with visible plastic seams, mock Louis Vuittons sporting intentionally incorrect logos. These kitsch “genuine fakes” are then like Tex-Mex tacos, mock turtle soup, or Chinese-Canadian chicken chow mein, valued on their own merits. On the other side, a *perfect* copy of something—a genetically identical clone, say, or a print rather than a painting—is not considered fake at all.

In this play of simulacra, do we observe a dismantling of the age-old reign of the singular real thing? Is the semi-sacred aura of the unique artwork finally dispelled, as Walter Benjamin suggested, leaving something even better than the real thing?

Perhaps. But you can't pretend to be Picasso or Van Gogh unless there are authentic artworks out there to imitate, just as you cannot lie unless there is such a thing as the truth to twist or evade. The real enemy of truth, as the philosopher Harry Frankfurt argued in a bestselling 2005 book, is not lying but bullshit. This form of meta-fakery does not reject the authority of truth; it pays no attention to that and just makes things up.

Originality issues from something that can't be imitated. It creates its own artistic truth.

Which sounds good. But what about those notorious cases where a valued work is suddenly revealed as a fake? It's still the same painting as before. Was our initial appreciation real, or fake?

Or was it, maybe, bullshit? Ouch. o

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**MARK KINGWELL** is a professor of philosophy at the University of Toronto and the author, most recently, of *Glenn Gould* in Penguin's Extraordinary Canadians series.

# Discoveries, Dispatches, and Discourse

## Curator Views

### An Ancient Venus Uncovered

A 35,000-year-old sculpture found in Hohle Fels, Germany, last year could be the first known depiction of a human female. Carved from mammoth ivory, the figurine was found by Nicholas Conard of the University of Tübingen, Germany. Conard says the discovery could radically change our thinking about Paleolithic arts. There have never been female figures among sculptures found in this region and this figure, with exaggerated female characteristics, predates the famous Gravettian Venuses by more than 5,000 years. Four ROM curators weigh in on the meaning of this discovery.

The early date of the Venus of Hohle Fels helps us to better understand the series of dramatic changes in early human cognition that is often called the Upper Paleolithic Revolution. Dated between 40,000 and 10,000 years ago, the Upper Paleolithic Period provides the first strong evidence for composite tools, deliberate burial, language, music, and art. For several decades, archaeologists and physical anthropologists thought that art did not appear until the middle of the Upper Paleolithic and that the "revolution" unfolded relatively slowly throughout the period. The discovery of the Hohle Fels Venus, when combined with other recent finds, challenges this long-held belief by pushing the date of the earliest art back in time. Instead of a gradual awakening, our ancestors appear to have made the leap to cognitively modern humans in an evolutionary burst.

**Justin Jennings, Archaeologist**

The discovery of the Hohle Fels Venus has intriguing implications for the history of art. What strikes me is not so much the actual discovery of the piece as the contemporary preoccupation with a search for "origins," for ever-earlier examples of art that connect with representations in our own times. This figurine's association with the female divine is a matter of conjecture, yet the details of its form and composition seem to cross cultural and geographic boundaries. I'm reminded of the form of the Yakshi in South Asian art—a nature divinity with associations to fertility, represented with ample breasts and wide hips. It appears on 3rd-century BCE Buddhist monuments and echoes into the 21st century with figures such as the ROM's "Untitled" (Blue Lady).

**Deepali Dewan, Art Historian**



This earliest female statue could reflect early modern humans' curiosity about different races. At the time it was created, modern humans throughout the Old World were beginning to come into contact with races they hadn't known existed—from Europe and Central, West, South, and likely East Asia. The depiction of a human figure in such an extraordinary way may represent one ethnic group's curiosity about the other.

**Chen Shen, Archaeologist**

Female figurines with exaggerated sexual features have been found associated with a range of peoples, from the hunters and gatherers of the Upper Paleolithic to the agriculturalists of the Neolithic. A prevalent interpretation relates them to the Mother Goddess, a supernatural mother having idealized features related to sexuality, fertility, and birth. But is the Hohle Fels Venus a representation of fertility? Or, is it perhaps the image of an ancestor, or even the work of a female carver celebrating her own humanity? These figurines undoubtedly embody multiple meanings for different peoples over time. The early date of this one is intriguing, but equally important is the potential to determine the figurine's meaning through the tight archaeological context in which it was found—the cultural context of the cave and the associated lithic debris, faunal remains, and worked bone and ivory that it rested with for the past 35,000 years.

**Kenneth R. Lister, Anthropologist**

## News

### Breaking Down Barriers

#### Museum honoured for accessibility

In a recently released video, the Ontario Ministry of Community and Social Services celebrates the ROM's initiative in implementing the *Accessibility for Ontarians Act*. Shot during Minister Madeline Meilleur's visit to the ROM during Access Awareness Week, the film follows the steps the ROM has taken to ensure accessibility for all staff and visitors—removing physical barriers, implementing audio guides, Braille wayfinding, sign-language podcasts, and more. To view the video, go to [accesson.ca](http://accesson.ca).

The ROM's most recent initiative: tactile tours for visitors living with vision loss. The first two tours, featuring descriptive language and selected artifacts to touch, take place in the Chinese and Greek galleries.

For information, contact Visitor Services at 416.586.8000.



## News

# Moulding Mistaken Point

### A unique lab for studying early deep sea creatures

Mistaken Point Ecological Reserve, Newfoundland, is home to one of the most spectacular fossil surfaces in the world. The site contains thousands of exquisite three-dimensionally preserved fossils dating back to 565 million years ago—the world's oldest examples of Ediacaran life forms. These are the earliest known complex multi-cellular organisms in the fossil record.

Led by Jean-Bernard Caron, the ROM teamed up with Research Casting International and the Provincial Government of Newfoundland and Labrador to produce an exact 70-m<sup>2</sup> (750-square-foot) replica of the fossil community. A portion of the replica—to be displayed in the ROM's future Peter F. Bronfman Gallery of Early Life—provides a unique natural laboratory for the study of early deep sea communities and early animal evolution. The site was added to Canada's list of potential UNESCO World Heritage Sites in 2004.

*Other project partners include the Johnson GeoCentre, Queen's University, and the University of Oxford.*



## From the Archives What Is It?

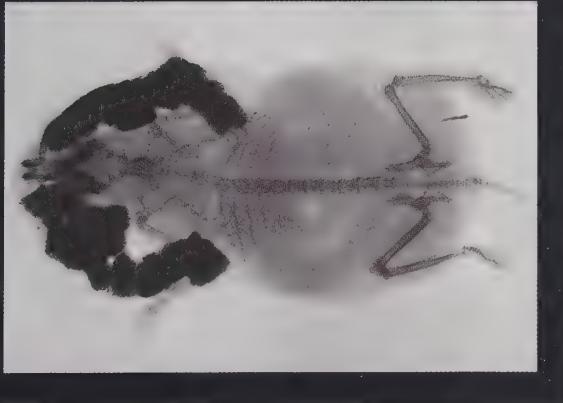
### Mystery "From the Archives" contest

The ROM's Archives contain records from the entire history and pre-history of the Museum, from archaeology to zoology, and botany to textiles. But sometimes, the identity of an item confounds archivist and librarian alike. This X-ray is one such item. It turned up in the records of the Mammalogy Department and baffled staff until they were able to decipher the handwritten note on the back.

Can you guess what it is? A winner will be drawn from correct entries, and will receive a ROM Shops gift card.

Please send entries to: [library@rom.on.ca](mailto:library@rom.on.ca) with "Mystery from the Archives" in the subject line.

JUDITH PUDDEN is the ROM's archivist



## New Acquisitions The Shrunken Head

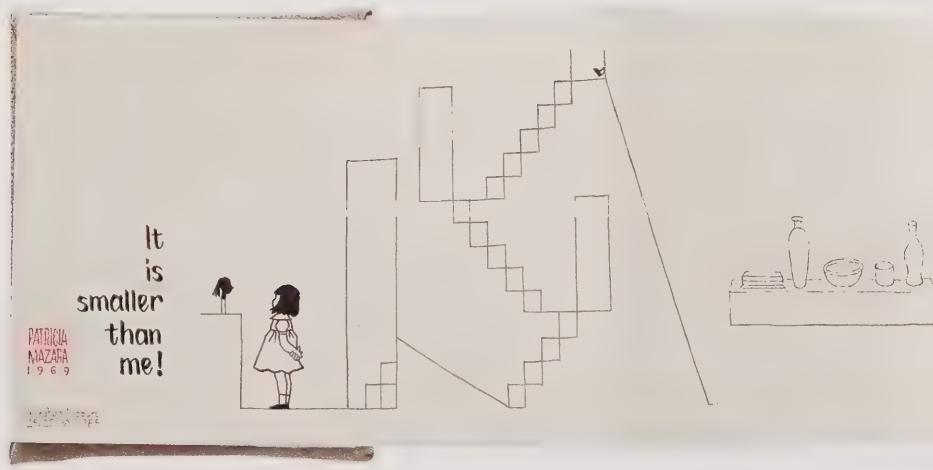
### An artist's enchantment with the ROM

From its beginnings, the ROM has had a powerful influence on young children, including such notable Saturday Morning Club alumni as Margaret Atwood and Robert Bateman. A recent donation to the ROM alerted us to another example of inspiration.

When she was five, Ontario artist Pat Allingham visited the ROM looking for the shrunken head. Years later, she created a hand-drawn scroll illustrating her childhood journey through the Museum. In 1985 she produced a limited edition of 25 handmade miniature accordion-fold books based on the scroll.

Handmade books were Allingham's specialty, and she produced numerous titles, including *Lemonade with Toad and Miss Tutt* (1988). With her passing in 2008, her daughter, Tabitha Baumander, donated the original scroll and one of the limited edition books—delightful additions to the ROM's rare book collection.

ARTHUR SMITH is head of the ROM's Library and Archives



# Inside the ROM's Bat Cave

What visitors will see in the updated, larger, and more mysterious exhibit

BY JUDITH EGER

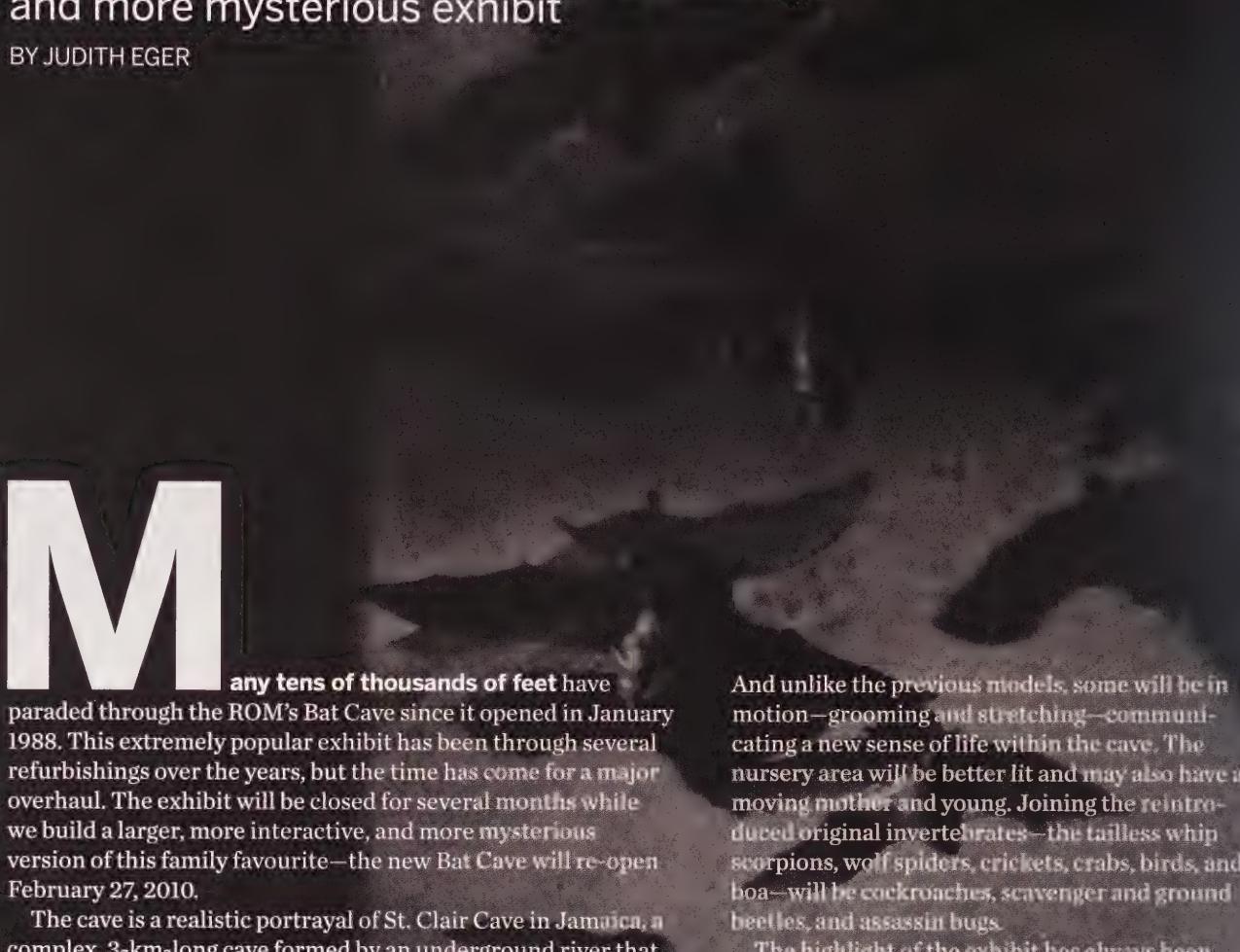
**M**any tens of thousands of feet have paraded through the ROM's Bat Cave since it opened in January 1988. This extremely popular exhibit has been through several refurbishings over the years, but the time has come for a major overhaul. The exhibit will be closed for several months while we build a larger, more interactive, and more mysterious version of this family favourite—the new Bat Cave will re-open February 27, 2010.

The cave is a realistic portrayal of St. Clair Cave in Jamaica, a complex, 3-km-long cave formed by an underground river that runs through limestone rock across the centre of the island. Four years in the making, the original exhibit was based on fieldwork done in March 1984 by a ROM team that included several artists and a mammal preparator who were also naturalists, a photographer, and a biology professor who specialized in bat echolocation—even a crew from the CBC was there to film the work for an episode of David Suzuki's *The Nature of Things*.

The team documented all aspects of the cave. The wildlife included bats, invertebrates, and birds living in the mouth of the cave and the predators that take advantage of this easy food source—feral cats and boas. The artists took casts of the walls and roof of the cave system, including the rocks and stalactites and stalagmites—everything but the temperature and smell of the cave was ultimately reproduced.

Designers of the 2010 Bat Cave are drawing on the original research as well as a more recent field trip to Jamaica. While much of the cave's original structure will remain, the refinished and recoloured version will have a more realistic floor, lower light levels, and a more mysterious atmosphere. New sound effects will mingle with the familiar sounds of dripping water and squeaking bats.

And, there'll be more bats. New artist reconstructions of six of the ten bat species known to inhabit the cave—a nectar feeder, a fruit eater, and four insectivorous bats—can be seen close up.



And unlike the previous models, some will be in motion—grooming and stretching—communicating a new sense of life within the cave. The nursery area will be better lit and may also have a moving mother and young. Joining the reintroduced original invertebrates—the tailless whip scorpions, wolf spiders, crickets, crabs, birds, and boa—will be cockroaches, scavenger and ground beetles, and assassin bugs.

The highlight of the exhibit has always been the dramatization of the actual nightly exodus when thousands of bats take flight, leaving their daytime refuge to hunt for food before returning to the roost by dawn. The restaging of this event promises to be even more spectacular.

The aim of the new effects is to make visitors feel they are in a real cave. But we also want them to feel they are being guided by an informed interpreter. A field guide to all the cave-dwelling species will be posted at the entrance to the new exhibit and a new introduction wall will depict bats in cultural contexts. Three-dimensional displays will show bats as mammals that fly and illustrate feeding and echolocation behaviour.

The biggest change is that the visitor will be immersed in a brief but powerful audio-visual show in “the cavern,” a natural theatre within the cave. The presentation will explain cave formation, the use of caves by bats as day refuges, echolocation, and the animals that share the cave with the bats. The latest technology will be used to bring the story to life in unexpected and exciting ways—you'll want to come experience it for yourself. o

## Bat Cave 1988

Caves provide bats with protection from predators as well as a constant range of temperature and humidity. Hundreds of bats roosting on the ceiling at the centre of the ROM's Bat Cave illustrate how caves serve as refuges. The bats use echolocation to navigate within the dark confines of the cave, allowing them to fly around stalagmites and stalactites. This gives them access to roosting sites deep within the cave and enables them to exit each evening to hunt for food.



## Bats and World Culture

Bats mean different things in different cultures and their images can be found on clothing, religious images, and household goods around the world.

Pictures of bats abound on the art and utensils of the people of Central and South America, where an abundance of bat species live. The Maya depict bat wings or faces on their art, and details of the heads, which are often shown on human bodies, are accurate enough to identify the species. Zotz, the Maya god of the underworld, is depicted with the head of a bat—sometimes a vampire, sometimes a leaf-nosed bat—on a human body.

The term vampire was popularized in the early 18th century when an influx of vampire legends made their way from eastern into western Europe. But the vampire bat species was not scientifically described until the early 19th century. The vampire bat got its common name from the European legend, which remains highly fashionable in pop culture today.

A Chinese robe in the ROM's collections is embellished with images of a bat and a swastika. In Chinese, the word for bat is *Fu*, which sounds like the word for blessing. The word for swastika sounds like the word *wan* which means 10,000. So the image represents 10,000 blessings.

**Right:** Bat and swastika imagery from a Chinese robe, 1795–1825



**Right:** Zapotec bat figurine, 600–800 CE



**Above, clockwise from top left:** Old entrance to the Bat Cave; clusters of bats roosting on the domed ceiling; details of the walls and ceiling of the Bat Cave; bat exodus.

# What's Eating our Sharks and Rays?

A ROM parasitologist travels the globe to study the big world of tiny tapeworms

BY LEE-ANNE JACK



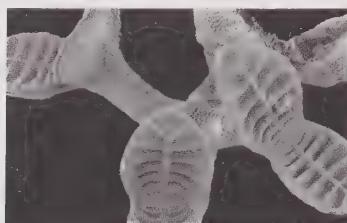
**Claire Healy**  
ASSOCIATE CURATOR  
Department of Natural History

**Academic Positions**  
**2007-present**  
**Assistant Professor**  
Department of Ecology and Evolutionary Biology,  
University of Toronto

**2006-present**  
**Associate Curator**  
Invertebrate Zoology section of  
the Department of Natural History,  
Royal Ontario Museum

**Education**  
**2006**  
Ph.D. in Zoology,  
University of Connecticut  
**2002**  
Master's in Zoology,  
University of Connecticut

**Cling Ons**  
Tapeworms use the front end of their body, which is modified into a muscular attachment organ (shown here), to grip the intestine of their host. Healy uses scanning electron and light microscopy to examine tapeworm features.



**Studying science takes ROM invertebrate zoologist** Claire Healy to unusual places. As a specialist in tapeworms that parasitize sharks and rays, she has a peculiar collecting method. She travels the world asking local fishers for the guts of their catches. "You could say I have a parasitic relationship with them," laughs the University of Connecticut-educated scholar. "They are a bit startled to meet someone who wants to dig around in fish intestines." But it's a win/win situation. She gets her parasites, and the fishers can still have dinner.

You'll find Healy anywhere sharks and rays are being caught. In 2007, she volunteered aboard a New Zealand deep-sea trawler with a government team that was setting fishing policy. And for years, she has attended a sport shark fishing tournament on Long Island.

Virtually all the known 950 species of sharks and rays are parasitized by tapeworms. Seven distinct orders are found in shark and/or ray hosts—one of which is a new order that Healy herself identified and published in the *International Journal of Parasitology* this year. Tapeworms are hugely understudied worldwide. But Healy was drawn to their complex relationships and intricate means of reaching their final hosts. And their slimy reputation? It was actually an attraction for the Illinois native who developed a love for small, soft, slimy invertebrates on a childhood trip to Maine where she was fascinated by moon snails.

Healy has added enormously to the record of tapeworm biodiversity by surveying and collecting in Borneo, Senegal, Japan, the US, Southeast Asia, Puerto Rico, New Zealand, and Australia, and in March she heads to Vietnam.

**Far left:** A tapeworm species that parasitizes the yellow stingray of Jamaica.



**Left:** A new species named by Healy parasitizes hammerhead sharks.

**Above right:** Adult rhinebothriidean tapeworms stained for light microscopy. They parasitize various species of rays.



Much of the work was done in collaboration with research teams led by Janine Caira of the University of Connecticut that included shark and ray taxonomists and experts on other groups of parasites. Typically, they'd troop off at 4 am to local fish markets to get first dibs on the daily catch. Healy and her co-researchers would help gut animals, take photos and measurements, and put things in vials—all of which tended to draw a crowd, especially children.

After all, slicing into shark and ray intestines reveals hundreds of tapeworms wriggling inside. Healy has seen individual rays harbouring up to 25 different species of tapeworms, which can range in length from 1 mm up to 20 cm, the length of a linguine noodle. "They are hotels for biodiversity," she says.

The most common question she gets is "Are the fish sick?" "But virtually every shark and ray is infected," she notes. "It's a normal part of their life."

Healy is part of a Planetary Biodiversity Inventories project examining tapeworms of all vertebrate groups—a team of 22 experts from 13 countries led by Professor Caira. Already Healy has discovered that ray tapeworms are extremely host-specific. Her future research will examine whether stingray tapeworms have co-evolved with their hosts.

But sometimes her skills are put to more esoteric use. When a collecting team decided to hold their own Fear Factor-type contest, Healy examined the raw food to ensure nothing was obviously infected. For herself? "I'm a parasitologist," she says. "I don't eat raw meat." Very wise. o

**U.S.A.**

**Heidi Sobol**  
SENIOR PAINTINGS  
CONSERVATOR  
Conservation

Heidi Sobol has recently travelled to The Houston Museum of Natural Science in Houston, Texas, and The Field Museum in Chicago, Illinois, to oversee transport and supervise installation of a ROM painting that is part of the touring exhibition *The Nature of Diamonds*. The ROM's *Portrait of Marie de Medici* after Francis Pourbus (1569–1622) shows the painting's formidable subject elaborately bejewelled. The painting travels in its own custom-designed shipping crate, which has an inner tray system, and Sobol accompanies this ROM treasure as a courier to ensure that its special display and shipping requirements are met.

**GUYANA**

**Deborah Metsger**  
ASSISTANT CURATOR  
Botany

Deb Metsger participated in the ROM's biological survey of mammals, birds, and plants at Iwokrama Forest in Guyana. The survey was designed to monitor changes in species diversity and abundance over the past decade using as a baseline surveys previously done by the ROM and the Smithsonian Institution. Metsger worked with Iwokrama forest rangers and a team of students from the University of Guyana to document which plants were bearing fruit in order to study animal feeding habits. She also gathered information, images, and plant specimens for display in the tropical forest cases of the Schad Gallery of Biodiversity. She was thrilled to be able to use a canopy walkway to reach above the forest and collect from the treetops.

**SOUTH AFRICA**

**David Evans**  
CURATOR  
Paleontology

David Evans has been working with colleagues from the University of Toronto and the University of Witswatersrand for the past five years on remarkable dinosaur remains from the earliest Jurassic rocks of South Africa. The fossils include excellently preserved eggs and nests of *Massospondylus*, a precursor to the giant long-necked sauropods. Some eggs contain tiny, completely intact dinosaur embryos, which are shedding startling new light on reproduction and development in early dinosaurs. Continued fieldwork has turned up several more intact nests from different rock layers, and the small locality is likely the oldest known dinosaur nesting site to which animals returned year after year to lay their eggs.

**DENMARK**

**Karin Ruehrdanz**  
CURATOR  
Islamic Art

The fieldwork of a specialist in manuscripts and miniature paintings takes place in quiet places: libraries. Research on the history of the illustrated book in Central Asia led Karin Ruehrdanz to several manuscript collections in recent years, among them the David Collection in Copenhagen. There, newly acquired materials helped her to understand the late phase of court art in Bukhara. Begun by emulating Persian painting, Transoxanian (a region corresponding with modern-day Uzbekistan, Tajikistan, and southwest Kazakhstan) book illustration dropped off about 1600 and nearly disappeared, only to develop its own visual language in the 17th century.

**INDIA**

**Deepali Dewan**  
CURATOR  
Asian Art

For the last seven years, Deepali Dewan's fieldwork has been the study of photographs from India in collections around the world—archives and museums in Canada, the U.S., England, and India. Photography is a global art form that shapes how we see and think about the world around us. Much of the visual and textual primary sources that she's been able to uncover shed new light on the history of photographic technology in India. This research has culminated in a book on the early Indian photographer Raja Deen Dayal that will be published next year.

**Where in the world are they?**

The who, what, and where from our international curatorial team

The ROM's Annual Appeal for Research helps fund the important work of these curators. Thank you to all our ROM Members who supported research in 2009 with a gift to this campaign. Our next appeal starts in the new year and we hope you will consider supporting Research at the ROM. Any questions? Please call 416.586.5544.





## An achievement in overachievement.

A forceful exterior with standard AMG Styling Package declares the All-New 2010 E-Class an achievement in design. The technological achievements of the car – distance-maintaining DISTROニック PLUS<sup>1</sup>, or tiredness-sensing ATTENTION ASSIST, for example – declare this a quintessential Mercedes-Benz. Inside and out, the All-New E-Class declares the achievement of its driver. The 4MATIC<sup>™</sup>-equipped E-Class is at your dealer or [mercedes-benz.ca/e](http://mercedes-benz.ca/e).  
The E-Class. You've arrived.

The All-New 2010 E-Class 4MATIC.<sup>™</sup>  
Starting from \$62,900.

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Not available in conjunction with the AMG Sport Package on the E350 4MATIC<sup>™</sup>.

# Re-living History



**In an experimental approach to research, archaeologists recreate ancient history and learn from first-hand experience**



BY ROBERT MASON



a. Spears were a key weapon for much of history.

b. The hoplite was the standard infantry of the Mediterranean world, simply a spearman with a shield. The letter "lambda" on these shields indicates that these are Lacedemonians, or what we call Spartans.

c. Alexander the Great built a powerful empire: he stole it from the Persians.

d. English longbowmen wisely didn't shoot from horses.

## In 1947, Norwegian explorer

**Thor Heyerdahl** designed and built a ship of balsa wood, the *Kon-tiki*, to see if such craft could have sailed from South America to Polynesia. His successful voyage is the stuff of legend. In 1969 he successfully sailed a reed boat based on ancient Egyptian prototypes from North Africa to the New World.

These were among the first attempts at what is now a recognized approach to archaeological investigation, known as experimental archaeology. Through trial and error, researchers try to rediscover how objects and buildings were made and used in the past.

After Heyerdahl's efforts, professional archaeologists soon began to adopt his approach and it became a mainstay of archaeological research. A classic early example is England's Butser Ancient

Farm. Started in 1972 by Dr. Peter Reynolds, who became Britain's leading experimental archaeologist, the farm is a re-creation of an entire Iron Age settlement, the original of which dated to about 400 BCE to 400 CE. By actually living the life of these ancient people and using reproductions of the artifacts they made, archaeologists greatly improved their understanding of living conditions and methods of agriculture, animal husbandry, and manufacturing during this time period (see [butserancientfarm.co.uk](http://butserancientfarm.co.uk)).

Today it's quite common for archaeologists to discover more about an object of antiquity by making a copy and putting it to use. Besides professional archaeologists, people called "re-enactors" are attracted to this approach. Some are just eccentric people who like to dress up, but a great many are serious researchers who put their hearts into expanding their knowledge of history. You could call them "amateurs," which to me is a fitting term, since etymologically it refers to people who love what they do.



ne aspect of re-enactment is presenting knowledge to the public through demonstrations, which sometimes take place in museums. Such “living history”

exhibits are a powerful way for people to understand what it was really like to live in the past, to see, touch, and perhaps even taste and smell history. During March Break, the ROM uses living history exhibits in the popular medieval program, which features accurate recreations of costume, dancing, weaving, sword-fighting, archery, falconry, and even writing with quill-pens. The power of this programming is that it entertains, making the audience receptive to learning. Visitors enjoy watching our medieval dancers in beautiful dresses and often rather absurd men’s attire of the period (I am personally convinced that fashion throughout the Middle Ages was a female plot!). It’s an evocative way to communicate what we know about the past.

Recently I was asked by a television company to take part in some experimental archaeology “tests” for a series about significant historical figures. Called “Ancients Behaving Badly,” the series will air in Canada on History Television. What first attracted me was the opportunity to do horse archery with the well-known US horse archer and bow-maker Lukas Novotny. And, I have to admit, it also turned out to be a lot of fun.

I had never before combined my limited skill as a horseman with my questionable ability as an archer to develop an understanding of one of history’s most important forms of warfare. Mounted archers were an important element of the battlefield since the 8th century BCE when Scythians came galloping and shooting their way out of the Eurasian steppes into the Mediterranean world. Huns, Parthians, Turks, and Mongols were among the steppe peoples to use this form of warfare. Unfortunately, what the producer wanted from me was to demonstrate the relative inefficiency of shooting an English longbow from a horse. Real horse archers used composite bows of horn and sinew with a wood core, and these were shorter and easier to shoot than the longbow, which is essentially just a really long stick with a string on it.

Luckily, the horse I rode, a seasoned performer called Hercules who had much jousting experience, knew exactly what to do. He charged down the lists, as jousting fields are called, with no need of persuasion, leaving me free to focus on the target. A good horse archer should be able to release an arrow as he charges towards the target, another as he passes it, and a third while charging away (the famous Parthian Shot). With the longbow, it was clear that to shoot forward I would poke the horse in the eye with my weapon and to shoot backwards I would poke the horse in the rear, demonstrating only too well the reason that horse archery depended on the

## The Hun Empire under Attila



b.

In the late 4th century, the Huns came out of the Eurasian steppes and invaded Europe. These nomadic people used mounted archery in their warfare, which was quite effective against the slow-moving Roman infantry legions. Generally, the Huns were stable neighbours to the Romans—as long as they were paid off. The greatest extent of the Hun Empire was under Attila, who invaded the Balkans, Gaul, and Italy. The empire collapsed within 15 years of the end of Attila’s rule.

a. The Hun Empire under Attila.

b. There is no first-hand description of Attila, but accounts describe him as broad, with a thin beard, flat nose, and tanned skin. It is thought that the Hun leaders were of Turkic origin. He ruled the empire from 434 to 453 CE.

development of the more advanced and shorter composite weapon. After failing miserably with the longbow, I switched to using the composite bow, and was able to fire three times.

For the same show we also tested “steak tartare,” preparing the steak by putting it under a saddle that was then ridden upon for eight hours (the steak was quite tasty once you took all the horse hairs off).

A segment dedicated to the Romans’ obsession with technology featured a system of levers and pulleys that was infamously used by Caligula in an attempt to assassinate his mother. (He tried to drop a lead weight on her head with it and sink her barge. He failed.) We also set up a trebuchet, a medieval siege engine that hurled massive rocks and fire-bombs at castle walls with great destructive effect, to recreate the sack of a city by Genghis Khan.

Next we tested the efficacy of the Greek phalanx (a huge rectangular formation of warriors) at the time of Alexander by staging an attack on a number of extras hired in Toronto. The extras were trained for some hours in the use of the 15-foot-long spears that would have been used by the phalanx. First I attacked the phalanx equipped as a hoplite, the lightly armoured warrior of the Mediterranean world. Armed with a 6-foot-long hoplite spear and a large shield, I found the hedge of longer spears of the phalanx I was facing intimidating. But once I had parried my way past the points, their weapons, so effective as a barrier, proved unwieldy for fighting. We didn’t just hypothesize about how this would have happened, but I actually felt the threat of a solid mass of men bristling with spears.

Like the sun breaking out from behind a cloud, it suddenly was much easier to understand how Alexander could have conquered an empire using the phalanx. But we also saw how vulnerable the phalanx was to a determined and confident attack with hoplite equipment and to Persian archers, whose equipment I next used against the extras. Slow-moving foot-soldiers are always vulnerable to the attack of archers, particularly horse archers. Even the redoubtable Roman legions behind their big square shields were vulnerable. In the Battle of Carrhae, or Harran, in 53 BCE, an

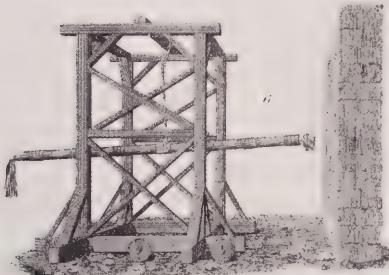
If you’d like to see a living history exhibit in person, join us during March Break at the ROM from March 15 to 19, 2010.

army of 35,000 legionaries under Crassus was annihilated by 10,000 Parthian horse archers. (If you've ever watched *Spartacus*, you will have seen the Roman leader played by Laurence Olivier. This same Crassus brutally suppressed the slave revolt led by Spartacus.)

But perhaps the most fun was recreating an attack on a Roman city by Attila the Hun. We used a battering ram wielded by the members of the Hamilton Police Emergency Response Unit, (known in American police-drama lingo as a SWAT team). Their experience in forcing entry was useful as they swung the battering ram to smash through the walls and doors of our stand-in Roman city: a condemned warehouse in the Toronto suburb of Etobicoke. The sheer power of this large beam of wood suspended on ropes, pulled back by Hamilton's finest, and released to swing forward with destructive force through anything we put in its way, gave us significant insight: when deployed, the battering ram must have struck fear into the hearts of Attila's victims. The simulation also provided practical information. Historical records attest that chains were used for suspension, a must if we ever try this again, because in our experiment the ropes were constantly being stretched by the weight of the wood.

During the Hunnic invasions of the Roman world, there were a number of leaders, but Attila is the most remembered. Huns were horse archers, and very effective against the slow-moving Roman legionaries, but little use against cities. So Attila adopted the siege equipment of the Mediterranean world, including the battering ram. It was sobering to think that the residents of these Roman cities would hear the crashing of the ram and know it was only a matter of time before the Huns entered their gates. When cities are taken, no matter how noble and righteous the cause of the attacker, bad things happen. The blood-crazed victors flood through the city streets looking for victims, and it's from such brutal human tragedy that names such as Attila are remembered.

If you see any of the series, "Ancients Behaving Badly," you may see our small contributions to experimental archaeology caught on film, and perhaps they will help you to imagine, and understand, the lives of those in our medieval past. o



above • This medieval ram is similar to the triangular-shaped ones Attila used in the early 5th century. Rams were usually covered to protect the besiegers from the ire of the besieged.

## Battle of the battering ram

At a condemned warehouse in the suburbs of Toronto, our intrepid archaeologist and the Hamilton Police Emergency Response Unit attempt to replicate the terror of a siege of a Roman city by Attila the Hun.



c • Engineer Paul Swayze rigs up the ram. The ropes needed constant re-rigging as the weight of the ram stretched them. Sources say the original ram would have been suspended by chains.



d • Members of the Hamilton Police Emergency Response Unit wield the ram. It is pulled back and released so its weight can pound into the surrogate Roman city.



e • Robert Mason smiles with joy at the effectiveness of the ram as it smashes through the wall with ease.



f • Although our ram was not the full size of Attila's, our wall was cement block, rather than a thick Roman stone wall. The Huns could take some time to breach a Roman wall, pounding away until it was finally brought down. The effectiveness of the ram was amply demonstrated.





# Faking It

FORGERY OF ART AND COLLECTIBLES HAS THRIVED SINCE THE DAYS OF ANCIENT ROME. TODAY EVEN THE WORLD OF FOSSILS IS NOT IMMUNE

# When Art Imitates Art

*Through the ages, copies of artworks have proliferated. But not always have they intended to deceive*

BY PAUL DENIS with SARA IRWIN

**For centuries, forgery of art and collectibles** has plagued the world, and the end, it seems, is nowhere in sight. In ancient Rome, when Greek art became popular, it was copied to meet the demand. During the Middle Ages relics associated with Christ and the saints were highly prized and reproduced in great quantities. Renaissance sculptors imitated ancient Roman sculptures and fobbed them off as genuine antiquities. By the 19th century, just about every kind of art object was being forged.

Sometimes artisans intentionally copy much older objects, and over time these copies are misunderstood and marketed as originals. But more often, forging begins when a collecting mania takes off and the number of people seeking a type of object skyrockets. As genuine material becomes scarce, its price escalates. That's when forgers, conspiring with unscrupulous dealers, step in—and reap handsome profits for their efforts.

The story behind Greek Tanagra figurines perfectly illustrates how intentional forgeries can spring up. One of the best-known types of Greek terracotta statuettes, these figurines are named for the ancient Greek town of Tanagra, where they were produced throughout the 3rd century BCE. Usually, the small sculptures depict a fashionable woman standing in a relaxed pose, elegantly clothed in a thin tunic and cloak. The people of Tanagra buried their dead with offerings—often these figurines, vases, or other household items. For 2,000 years their graves and the terracotta statuettes remained undisturbed.

Then, in 1871 local villagers began finding the tombs and looting them. Within a few years, almost 10,000 graves were plundered, flooding the Athenian market with thousands of genuine Tanagra figurines. Their fine workmanship, style, and elegance quickly caught on in the rest of Europe and the figurines became a collecting phenomenon from London to St. Petersburg. Before long, demand far exceeded the ever-diminishing supply. By 1876, outright forgeries were being mass-produced, and counterfeit statuettes quickly swamped the art markets of Europe.

Some copies are strikingly similar to the real thing. But telltale signs give away a forgery. The base and figurine of forgeries were sometimes cast as a single piece, whereas genuine Tanagra figurines, like the ROM's example, were always crafted separately from their bases. In the

forgeries, the faces are poorly executed and the folds of the clothing often are very lightly modeled and almost lifeless compared to the genuine example. Finally, the surface of the forgeries looks artificial with encrusted dirt and bogus patches of white slip, and the clay is far more brownish than the authentic light orange-brown clay. Despite these clues, Tanagra forgers enjoyed great success in the late 19th and early 20th centuries.

Advances in science have made it easier than it was a century ago to catch the cleverest forgeries. A test called thermoluminescence can determine when clay was fired in a kiln—proving, for example, whether a figurine was fired only 100 years ago or more than 2,000.

*example: GREEK TANAGRA FIGURINE*



**Left:**  
Standing Woman,  
Terracotta, about  
250-225 BCE.

The base and  
figurine of forgeries  
were sometimes  
cast as a single  
piece, whereas  
genuine examples  
were crafted  
separately from  
their bases.

**Right:**  
Standing Woman,  
Terracotta, late  
19th century.

With Chinese collectibles, it's a different story. The Chinese have been collecting antiques since at least the Northern Song dynasty (960–1127). Demand at that time outstripped supply, and the shortfall was filled not by forgers but by artisans honestly replicating ancient objects. When they did not have a real antique to copy, they often referred to illustrations in woodblock catalogues. The intent of these "archaic" pieces was not necessarily to mislead. Copying was seen as paying respectful homage to the past. But in today's market, these reproductions can be mistaken for the artifacts they imitated, and passed off to the unwary as originals.

Two jade cicadas from the ROM's collection illustrate the difficulty of authentication. One is simply carved, with few details, while the other is beautifully detailed, down to the spots on the wings. The plainer one probably came from an Eastern Han dynasty (25–220 CE) burial, where it would have been placed on the tongue of the deceased. Jade was believed to stop the body from decaying; the cicada represented immortality and resurrection. The detailed example is fairly recent, about 100 years old, inspired by more ancient pieces. For collectors, there is no way of knowing if the newer piece was intended to deceive. It may have been made simply as a beautiful little amulet or decorative object.

In China today, as in many other countries, there are enterprises that thrive on the production of fake antiques. They duplicate a wide variety of artifacts ranging from "Neolithic" jade carvings and painted-and-carved lacquer objects to bronze and ceramic vessels. Some target the tourist trade, but others go straight to the antiques market, where they fool unsuspecting buyers and dupe even seasoned experts.

With the trend toward steep increases in art prices, the forger's nefarious trade will certainly continue to grow. That's why it's imperative for collectors to educate themselves with as much knowledge as possible by visiting museums, handling genuine objects offered for sale by respected dealers and auction houses, and remembering the savvy collector's motto: "buy the book before the coin."

## example: CHINESE JADE CICADA



**Left:** Cicada, Jade, Eastern Han dynasty, 25–220 CE.

**Right:** Cicada, Jade, Qing dynasty, 19th – early 20th century.

### Forgery or Homage to the Past?

These carved jade cicadas illustrate the problem in authenticating Chinese works. For hundreds of years, copying was seen as paying respectful

homage to the past. So there is no way of knowing if this 19th-century cicada was simply inspired by a piece like the one made during 25–220 CE or if it was made to be passed off as an actual older piece.

## How To Avoid Knock-Offs

Five tips from the RCMP and the Canadian Standards Association

1. Be suspicious of any item that is deeply discounted. If it sounds too good to be true, it probably is.
2. If the quality of the packing, design, colour, and printing is shoddy, inaccurate, or strange in appearance, walk away.
3. Look for spelling mistakes and typos. They are a sure giveaway.
4. Always buy brand-name items from highly regarded, well-known retailers with clearly stated return or exchange policies.
5. Always purchase medications and health products from reputable sources.

## Buyer Beware

### The Hidden Cost of Counterfeits

BY PAUL DENIS

Today's forgers go far beyond the art market, creating all manner of phony consumer goods: designer clothing, jewellery, watches, and luggage, DVDs and CDs, electronic equipment and computer software, pharmaceuticals, and even food. Counterfeits are everywhere and no product or business is immune from being hijacked. The internet has enabled rapid expansion of the trade in counterfeit goods, offering thousands of knock-offs and spurious works of art and collectibles for sale every day. It may seem innocent enough

to purchase knocked-off or pirated goods. But apart from costing companies billions, there can be disappointment and unexpected dangers in these purchases. Black market CDs, DVDs, and entertainment equipment are often poorly made. Pirated computer software may be faulty or infected with spyware and nasty viruses. Knock-off household products and automotive parts are sometimes so sub-standard that they have caused fires in the home and serious and fatal car accidents. Counterfeit hockey equipment may not offer the expected, if any, protection. Bogus pharmaceuticals and

contaminated food can lead to illness and death. The internet sites that peddle much of this contraband can be fronts for identity and credit card theft rings. The list goes on.

Even buying a knock-off Louis Vuitton handbag or a pair of fake Calvin Klein jeans or Nike running shoes can have consequences not immediately apparent. While legitimate companies suffer significant losses in sales revenue and governments corresponding losses in tax revenue, there are further implications: retail stores may be unable to compete with outlets that sell bootlegged products and may be forced to lay off staff or close their doors.

In order to keep prices low, businesses that do make knock-offs frequently pay slave wages, and their workers—adults and children alike—often labour long hours in unsafe factories and overcrowded sweatshops. And all too often, the proceeds end up in the coffers of organized crime cartels.

Those who buy counterfeit consumer goods or dress in fake designer labels are mistaken to think no one is getting hurt. Consumers, taxpayers, workers, and all kinds of large and small businesses end up suffering the consequences.

# When is a Fossil Not a Fossil?

*Amber, trilobites, and insects—most any seasoned researcher of fossils knows the tell-tale signs of phony specimens*

BY JANET WADDINGTON

## It's not only in the art and retail worlds that fakes are found.

In 1726, noted natural scientist Johann Beringer published a scholarly discussion of hundreds of fossils that were completely fake. They had been carved from stone and presented to him as authentic fossil finds. It was the ultimate fossil hoax. Invertebrate fossils have long been popular as collectibles, and as their attractiveness and market values have risen, so too has the temptation to improve on nature. Here are a few forgeries the ROM has come across.

Fossils of trilobites—extinct relatives of crabs and sow bugs—are particularly collectible. Morocco is famous for its superbly preserved trilobite fossils. It is also home to a strong cottage industry dedicated to making less-than-perfect fossils more attractive to unsuspecting buyers.

A large trilobite (*Phacops* sp.) found without a tail, has had one from another specimen skillfully grafted into the matrix. But the tail is from a slightly larger animal—a fact immediately obvious to any trilobite aficionado. As well, it was added in the wrong place, making the animal too long. A little digging with a needle revealed the join. Ironically, the trilobite's own tail is actually there, just slightly displaced. We were pleased to acquire this inexpensive fraud as a good example of Moroccan skill.

A second trilobite has parts that were “replaced” by another common forgery technique in which parts are carved into the matrix and painted to match the fossil. The giveaway here is often a lack of bilateral symmetry. Highly doctored fossils usually have

a chiselled rock surface, which helps hide joins, although authentic fossils may be chiselled, too. Sometimes glues and paints fluoresce under ultraviolet light, giving away the forgery. This one is fairly typical of fakes from Morocco.

In Lebanon, the Cretaceous rocks are well known for beautifully preserved fossils of fish as well as shrimp and squid relatives. Unfortunately, here too, many fossils are highly restored for sale. Small shrimp are often outlined with reddish paint, and their antennae either accentuated or actually added with a fine paintbrush.

The squid-like belemnite fossil shown at the bottom of the page, showing its internal shell, ink sac, and other internal structures, supposedly demonstrates the rare preservation of the soft body outline. Part of the soft body *may* have been visible originally, but “excavating” the fossil would not have revealed anything more: soft parts tend to appear only as slight colour differences on the fossil’s surface. By applying a damp swab we were able to remove the paint used to enhance this fossil. We keep it as a wonderful example of “buyer beware.”

Another common target for fraud is amber, which has been prized for millennia for use in jewellery or amulets. Clear amber often contains the remains of insects that became trapped in the sticky resin—nature’s flypaper. Incidents of fake amber abound. Look-alike amber jewellery has been made from glass and a variety of synthetic resins, and often includes insects for an “authentic” appearance.



**Left:** Plate from *Lithographiae Wirceburgensis* printed in 1726 by Johann B. A. Beringer at Würzburg University, Germany. The fake fossils came to be known as “The Lying Stones.”

**Top right:** Fantasy fossil insect made from fossil bits. Originated in a street market in Java.

**Bottom right:** Fossil squid-like animal showing internal shell and ink sac as well as an outline of soft body parts. The soft parts are painted on. There's a repaired break in the fish's head, which is also painted on. Mid-Cretaceous (112 million years old), Lebanon.

Chemical and physical tests can identify fake amber. But there are also visual clues: look for obvious flow lines from casting of liquid resin and inclusions that are too perfect. The fat flies in this large sphere show no signs of having struggled or of being munched by predators while immobilized by the resin. And faint layering is visible where the liquid resin was poured. Real amber is soft, but brittle. It would be extremely difficult to form a sphere this size from real amber. This piece was purchased knowingly as a fake by a private collector and donated to the ROM.

A smaller irregular piece is real amber with tiny insects as well as fragments of plants, bark, and insect frass—the stuff you'd expect to find trapped in a flow of sticky resin.

Some fake fossils are just plain fun. A fantastic insect forged from various fossils—barnacles, oyster shells, and sea urchin spines—was offered for sale by a serious fossil dealer, who had picked it up in a street market in Java knowing it wasn't real. We had to have it for our "pseudofossil" collection. It would have remained pure whimsy had we not received an email enquiry several years later from someone wanting more information about a giant fossil insect she had bought in Sumatra. It was identical to our fantasy fossil.

A reputable vendor will not hesitate to point out repairs or even major reconstruction of a fossil. Sadly, though, many fossils being offered for sale have changed hands so often that the inexperienced proprietor of a small rock shop may be disinclined, or unable, to tell you about such manipulations. So don't forget to look for the telltale signs of a fake.

#### example: AMBER



**Left:** An unidentified termite with eggs and frass, preserved in real amber. Miocene (15 million years), near Santiago, Dominican Republic.



**Right:** This 2-inch (5-cm) sphere of synthetic resin contains modern flies and possible chunks of real amber. Dominican Republic.

**fake!**

inclusions. The tiny insects and fragments of plants, bark, and insect frass embedded in the real piece are what you'd expect to find trapped in a real flow of resin.

**Check the Insects**  
Amber is a common target for fraud. Often, insects are added to make it look realistic. The fat flies in the fake sphere on the right look too perfect to be authentic

#### example: TRILOBITE



**Left:** A well-preserved, slightly restored example of *Phacops* sp. It has mineral-filled cracks that go through the rock and the fossil, usually a good indication that the fossil has not been highly restored. Devonian (370 million years old), Morocco.



**Right:** Restored composite of the trilobite *Phacops* sp. Arrows indicate the added pygidium (tail) and the trilobite's own pygidium still partially embedded in the matrix. Devonian (370 million years old), Morocco.

*Invertebrate fossils have long been popular as collectibles, and as their attractiveness and market values have risen, so too has the temptation to improve on nature*

#### example: TRILOBITE

**fake!**



**Left:** A highly restored and carved specimen of the trilobite *Acadoparadoxides briareus*. Middle Cambrian (505 million years old), Morocco.

**Right:** Complete *Acadoparadoxides briareus*. Purchased from a reputable collector/dealer. Middle Cambrian (505 million years old), Morocco.

**Look for Lopsidedness**  
Parts of the trilobite on the left have been faked—they've been carved into the rock and painted to match the real fossil. The giveaway, as here, is often a lack of bilateral symmetry. The real *Acadoparadoxides* has 18 thoracic segments. This fake has only 13 to 15 and they do not match up from one side to the other.

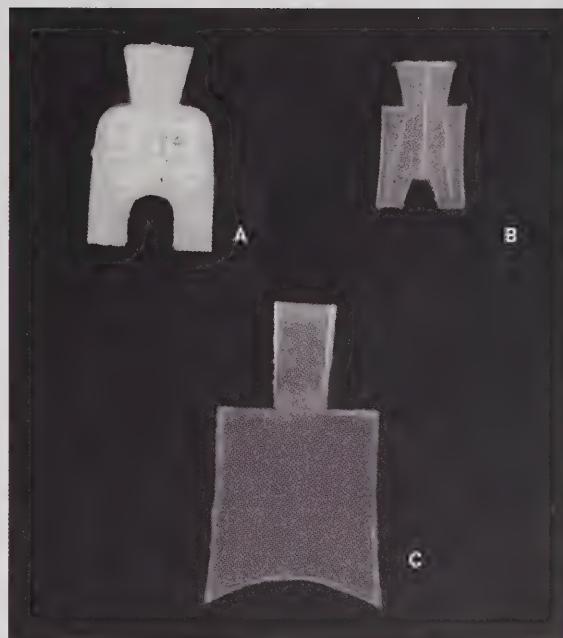
# How technology helps detect fakes and frauds

## The ROM's new digital X-ray machine

BY HEIDI SOBOL

**Digital X-ray detection** is a valuable diagnostic and research tool that can help curators uncover fakes, forgeries, and fraudulent artifacts. Viewed with the naked eye, no visual differences can be easily noted in the three Chinese bronze coins pictured here. But the digital X-ray image reveals forgeries in two coins. The one at the upper left is composed of a material other than pure bronze. The bottom one is even more interesting. It is an amalgamation of two coin fragments joined together at the "neck." The join makes this coin considerably less valuable than if it was a real, complete version, but surprisingly, it is still more valuable than each of the coin fragments. o

### X-ray Vision



This digital X-ray shows three Chinese coins dating from the 5th to 3rd century BCE. With the ROM's new rapid X-ray technology, gone are the days of multiple X-rays and lengthy film processing.

A Non-bronze coin

B Genuine bronze coin

C Amalgamated bronze coin comprised of two similar fragments made to look like one rare and valuable coin

## How Real is Real?

### Repair and restoration in the paleo world

"Is it real?" This is possibly the most-asked question about our fossil galleries, and with good reason. In paleontological terms, "real" and "not real" are not absolute concepts. There are several grades of "not real," ranging from repair and minor patching, to major restoration, through to reproduction and total fabrication.

Infilling of missing pieces is common when preparing real vertebrate specimens such as dinosaurs for display. The "not real" elements can include fragmentary bone that has undergone major infilling, a piece that has been sculpted to recreate the missing one of a pair of bones—an arm or a shoulder blade, for instance—or it can be a cast.

A fossil cast is actually not a fake, but a scientifically accurate copy of the original, as precise as the impression your dentist might take of your mouth. Casts of fossils are often used for research, teaching, and display, to allow multiple viewers to see the original or to reduce the amount of handling of a rare or delicate original.



**Top left:** Assembling a dinosaur skeleton in 1973. Missing vertebrae (in white) were reconstructed in plaster.

**Top, right:** The ROM's research-quality cast of the world's biggest trilobite *Isotelus rex*. The original was retained by the Manitoba Museum.

**Bottom:** The front dinosaur is a cast. The real bones have been set aside for research. The dinosaur at back is almost completely real fossil bone.



# Beetle Mania

Exploring the dark recesses of the ROM's live bug room

BY LEE-ANNE JACK



**For years it was the subject of rumour and conjecture**—even becoming the topic of *Toronto Life* magazine's "Urban Decoder" column: Does the ROM really have a live bug room? The answer, as I've seen for myself, is yes. Strange as it may sound, hundreds of flesh-eating dermestid beetles toil 24/7 at the ROM, expertly dispatching carcasses of birds, mammals, reptiles, amphibians, and fish, picking the skeletons clean as a licked dinner plate. It's a vital task in preparing specimens for research or display and one that the beetles perform to perfection.

Other means do exist for de-fleshing skeletons—boiling, macerating (letting the carcass rot in water), chemicals, maggots. But they're not as efficient, more damaging to the bone, and even less appealing than a roomful of beetles, which usually leave no mark on even quite delicate bones. It's a feature that's important to ROM biologists since the Museum's skeleton collection is like a huge reference library, an invaluable tool for systematics—the science of identifying and classifying species and determining how they are related.

The beetles' office space? A dark room in the ROM's basement, metal-lined to keep the critters inside and munching what's on their pre-planned menu. After all, skin beetles, as these members of the order Coleoptera are sometimes known, will devour just about anything—wood, drywall, carpet, paper, some plastics. Organic material is their specialty. If they escaped, they could cause serious damage to the Museum's natural history collections and artifacts with organic components.

Admittedly, harbouring scavengers for de-fleshing skeletons is kind of gross. But since contestants on certain reality TV shows began gagging down live maggots, cow bile, and bird embryos and lying in pitfuls of roaches or worms, grossology seems to have gone mainstream. No wonder then that the ROM has stepped up to share its previously dark secret. Last spring, the Museum installed a webcam in its bug room. Visitors to the ROM's website can now watch the beetle action live in real time—a microcosm of nature's cycle of birth and death. Because the room must remain dark to mimic the bugs' natural habitat, the webcam is on infrared, producing black-and-white images. In the first four months, the site received more than 15,000 hits. Suspicions are that it's not just the 9- and 10-year-olds who are watching.

Many museums with sizeable natural history collections—as well as wildlife-services labs, taxidermists, and some zoos and schools—have bug rooms. In researching this story I even came across numerous do-it-yourself internet sites on how to set up your own bug room and discovered that you can order a bug room starter kit on ebay! ROM ornithology technician Brad Millen tells me that the ROM's has been going since the 1930s, and started with about 200 beetles. When the colony is on a high—that is, when a large number of beetles are ready to feast—as it is at the moment, they consume specimens quickly. A golden eagle, gone in a week and a half. A small snake, just a single day.

When I ask Millen how many bugs would be there now, he's circumspect: "I wouldn't want to even hazard a guess. I put a trumpeter swan in there on a Thursday morning and on Monday when the bugs scattered, it was like someone pulling off a blanket there were so many live bugs on it." When he was first hired in 1973, Millen recalls his initiation into the new job, part of which was working with the bug room: he was locked in for a couple of hours with the lights out. It didn't seem to faze him. "When I combed my hair there were a couple of adults still in there," he calmly recalls. But there's no danger to a live specimen like Millen. The beetles are interested only in carrion.

Usually, the locked room is open only to curators, but for this story, ROM executive editor Victoria Littler and I are going in. Kevin Seymour, ROM assistant curator of paleontology, preps us for the tour. "Some bugs might fly onto you," he warns. Not a pleasant thought. "We'll step up and then once inside it's a step down"—protection against beetle escapees. A fibreglass-coated anteroom with door sweeps on each door, bug zappers, and negative pressure creating a vacuum on the main metal entrance provide further backup. We open and close a series of doors as if we're headed to Control Headquarters with Agent 86. All we need is a shoe phone and campy theme music. Would you believe that builders of the 1980-vintage room had to return four times to resolder because the beetles could eat their way through tiny holes in the metal where it was screwed to the drywall? You should—it's true.

Although I've long been curious about the bug room, I can't shake a slight feeling of dread as we approach. A hand-lettered sign posted by some wiseacre doesn't help: "Abandon hope all ye who enter here." But inside, when Seymour flicks on the lights, I'm relieved that the seething horror-film mass of bugs of my imagination doesn't materialize. Yes, there are lots of the long, dark-coloured beetles about the size of the pill bugs you see in your garden, but they scuttle here and there on the floor among the cardboard boxes of carcasses searching out their next meal—today an assortment of turtles and snakes. Most of them are probably hiding from us—and from the light. So the visual is okay. It's the stink of the place that has us instantly breathing through our mouths, and making it abundantly apparent why Millen has no trouble getting a seat on the bus on days he's worked in here.

**Left:** ROM technician Brad Millen examines the skull of a barred owl that was cleaned in the bug room.



They are the size of a coffee bean, but they certainly have an appetite!

It's the colony's dung that's so pungent. Millen describes it as the smell of a butcher shop, a kind of musty odour. "But it's like anything else," he says. "You get used to it." That's hard to imagine.

Seymour spritzes some of the dry carcasses with water. "See how the bugs'll come up for a drink," he points out. The beetles thrive in a warm, moist, and dark environment. For the colony to continue, it has to be fed regularly. These are beetles that have eaten through specimens ranging in size from a hummingbird to a horse. Mind you, the curators de-skin and eviscerate any carcass and remove most of the muscle mass before the beetles get at the specimen.

Today no bugs are flying. The temperature is pleasantly tropical in the climate-controlled room, though I later learn that this is cooler than usual. It may not have been up to the 30°C the beetles need for takeoff. It's the adults who sometimes fly when searching for food. Once they've found it, they mate and lay up to 90 eggs in crevices near or in a carcass. The larvae, once they hatch, do most of the work. They continue to munch as they go through up to five moults, or instars, before pupating and completing metamorphosis as adults. In the outside world, these beetles, the last wave of scavengers to arrive on a human corpse, are one of the species that CSI workers use to estimate how long a body has been dead.

Keeping an eye on the bugs' progress is also important for curators. How fast the bugs skeletonize a carcass depends on how high the colony is. The one drawback with the beetles is that they'll chew through immature bones, which are not yet calcified. One curator, studying a species of bird of the "confusing Empidonax Flycatcher complex" had collected two species told apart only by their calls and was looking forward to finally doing morphological measurements on them, or identifying them by their skulls. "We put them in the bug room on a Friday afternoon,"

## ② Anatomy of the Bug Room

The buffalo beetle, the hairy larva of the carpet beetle, is the main bug in the ROM's bug room. Originally this species was discovered by buffalo hunters. "They would take the hide off the buffalo first and when they returned to take the tongue and hump, supposedly the tastiest parts, they noticed these bugs," says ROM ornithology technician Brad Millen. "That's how they got their name." There are also drugstore beetles, so named because they were pests of apothecary powders in centuries past. They remain common kitchen pests around the world today.

The colony has been living in the ROM's bug room for more than 70 years, and is something like a small ecosystem of its own. "We started out with just the one type of beetle and the other ones got carried in there on specimens," says ROM assistant curator of paleontology Kevin Seymour. "There have been species introduced and have died off over the years." He's seen mealworms at times. And there is now a predator—the red-legged ham beetle—that preys on the other two dermestids. The largest of the three still in the colony, these shiny green or blue beetles prey on the other two beetles' larvae and in desperate times would even eat one another.

But most fascinating is how evolution could be taking place under our noses. "There is some talk," says Millen, "that the beetles may have slowly changed, gotten larger than wild ones because they've been isolated for so long."



# The science of systematics gathers “data that can be stored like seeds against some future day when they will yield a harvest of understanding.”

—Lawrence Small, former secretary of the Smithsonian Institution



Left: Beetles dining on a wolf skull in the bug room.

Watch the bugs live in action! at [rom.on.ca/schad/insects.php](http://rom.on.ca/schad/insects.php)

says Millen. “They normally take about a week. But the colony was so high that when we came in Monday morning there wasn’t a scrap of skull bone left. It was a bit sad.”

Curators also have to ensure that the moisture balance in the room is right. The meat can’t be too wet or it’ll rot or go mouldy. Too dry and the bugs won’t eat it. Seymour points out a snake gall bladder, a rare uneaten organ left in one of the boxes. “They don’t usually seem to mind poisonous snakes,” he says. But there are a few other things they don’t like. Amphibian skin and skunk scent glands are also no-goes. Millen says birds are their favourite food.

The individual ribs and vertebrae of a skeleton are sometimes left attached together by the bugs. But left long enough, they’ll eat through the tiny bit of cartilage that holds the bones together. “We use some skeletons with the bones still articulated, or attached together, usually for display or education,” says Seymour. “But even for research specimens I like it if they leave them articulated. That way I can use fishing line to string the vertebrae in the correct order, before I soak the bones apart.” In the case of snakes, this produces a kind of snake necklace, perfect for studying all aspects of the bone. For Millen, there’s a bit more digging. Bird toes can be pretty tiny and hard to find among the dead bugs and cast-off larvae casings. “You have to know your comparative anatomy,” he says.

So where do the corpses come from? Some are brought in by ROM scientists doing fieldwork. But others come from wherever curators can get them—Ontario’s Department of Natural Resources, zoos, road kill, medical facilities, even the pet trade.

Some of Millen’s grossest stories are of the carcasses that didn’t make it to the bug room at all. One ornithologist had collected a series of mynah birds in India that were meant to be shipped back by plane, but were accidentally sent by slow boat instead. Originally wrapped in white linen, when the package arrived, the cloth was

brown and dripping. The flesh of these birds slipped right off the bone. For Millen, who picked them up at the post office, it wasn’t pretty. “I had to get my hair cut, practically shave off my beard, and my clothes still stank after being washed three or four times,” he says. “It was horrible.” Even after being bleached, the specimens still retain some of their aroma today.

In spite of such unpleasantness, for curators, the bug room is a bonanza. Seymour began a comparative anatomy collection in the 1980s—which together with the ROM’s fossil collection now numbers more than 70,000 specimens and counting and the ROM’s ornithology, mammalogy, and ichthyology collections hold another 60,000 or more skeletons processed in the bug room. When the beetles are done with them, the bones are soaked in water and any non-bone material is scraped off with a scalpel. The bones are then dipped in bleach and each is meticulously numbered. It must require enormous organization. “Yeah,” admits Seymour. “But that’s what we do. Bones R Us,” he jokes. Each specimen is stored in its own vial, box, or drawer.

Without the skeleton collection, the ROM’s systematics studies would fall short. Examining the characteristics of bones is the bedrock of systematics, although DNA work is equally important. “All organisms vary,” says Seymour. “What’s the same, what’s different. That’s the basis of all classification.” Scientists from across Canada, the US, and even farther afield come to study the ROM’s skeleton collections. They may be trying to identify single bones or researching a series of skeletons to discern how a lineage of species is related.

Some departments are using the bug room less frequently as they begin to rely more heavily on tissue samples. All they need is a chunk of muscle, liver, and heart—the best sources for extracting DNA. But in vertebrate paleontology, bones remain the keys to knowledge. ROM dinosaur curator David Evans has his students working on different groups of living reptiles and comparing them to fossils, so those species are being sourced and skeletonized in the bug room. “Virtually every visiting dinosaur researcher also dips into our recent reptile collection while they’re here,” says Seymour.

While knowledge about how species are related can have a variety of applications, none of them is likely to be a life-saving medical breakthrough. Instead, biologists interested in nature and evolution use the research to test various theories: of species originations, of continental drift, of rates of evolution. But fundamentally, systematics is a pure science that seeks knowledge for knowledge’s sake. As Lawrence M. Small put it so beautifully during his tenure as 11th secretary of the Smithsonian Institution, its purpose is gathering “data that can be stored like seeds against some future day when they will yield a harvest of understanding.”

To that end, in their dark basement office, the ROM’s bugs continue to dine at their vertebrate banquet. Their task may be lowly, but it’s in the service of ROM scientists on a grand quest—recreating the ultimate tree of life. o



Reptiles	Small bird	Big bird	Deer	Dinosaur
3 days	2 days	5 days	2 weeks	4 weeks?



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# Fake Food

## Gastronomic frauds leave a bad taste

BY JAMES CHATTO



**Strolling through the aromatic labyrinth** of the spice market in Istanbul some years ago, I was astonished by the mounds of saffron for sale at an irresistible price. I brought bags of it back to Toronto and shared it with friends, basking in their gratitude. It was only when I started to cook with it that I discovered the stuff was counterfeit—merely threads of paper stained with turmeric that gave my paella the flavour of wet cardboard. Such are the scandalous forgeries of the gastronomical world—small fakeries, nothing grandiose. No volumes of Hitler's recipes, no Piltdown flan.

It stings to be the rube who gets suckered by a culinary scam, but I can't help admiring the ingenuity of some of the forgers. Imagine the effort involved in a famous caviar jape of the last century in which tins of Caspian beluga turned out to contain beads of potato starch moistened with fish oil. Or the efforts of the anonymous English vintner who filled genuine Beaujolais Villages bottles with home-made wine dyed red with beetroot juice: he went to the trouble of shipping the empties from Russian restaurants and sold them in London pubs at Christmas time. The late Cosmo Pusateri, Toronto grocer extraordinaire, once told me he was approached by a fellow offering cut-price Perigord

Among c5's sweet "fakes": a baba au whisky that's pure Canadiana—dipped in whisky syrup, paired with a "pile of leaves" of squash, parsnip, and cider jellies, and served with a chocolate rake.

truffles. They were a tasteless Oregon fungus enhanced by truffle oil. Pusateri threw the man out of his office.

Caveat emptor, I suppose. Some gulleries are so widespread they have almost become accepted. Most of the wasabi sold in our high street sushi bars is a mustard paste, tasting nothing like the far more complex flavour of genuine freshly grated wasabi root. And just last year I was excited to see rare white tuna sashimi offered in a Toronto restaurant only to be presented with escolar, a commonplace fish with a completely different texture. The teenaged waiter didn't see it as a problem. "We sell much more by describing it as white tuna," he explained. No doubt.

Putting things into our mouths is an intimate act and there is an implicit bond of trust between the restaurant-goer and the chef who feeds him or her. Irascible British chef Gordon Ramsey recently came under fire for selling dishes in his high-end restaurants that were mass-produced in a communal commissary miles away. "Every top chef with more than one restaurant does it," was the gist of his response. Yes, but not every chef makes a living on TV by yelling at cooks who take shortcuts in the kitchen.

Does it matter? A great chef is always something of an alchemist, turning humdrum ingredients into gold. When I was a boy, a family treat was dinner at the local Indian restaurant where the prawn curry was famously delicious. Alas, the place was suddenly closed down when the authorities found out the sauces were thickened with cat food. Hundreds of empty cans of Kit-e-Kat in the garbage were the giveaway. Ah well... ignorance was bliss. I still miss that prawn curry and its mouth-watering *je ne sais quoi*. o

**JAMES CHATTO** is a Toronto-based food writer, *Toronto Life's* food columnist, and editor of *harry magazine*.

# Holiday Shopping

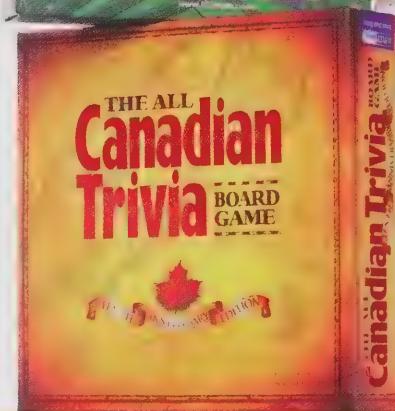
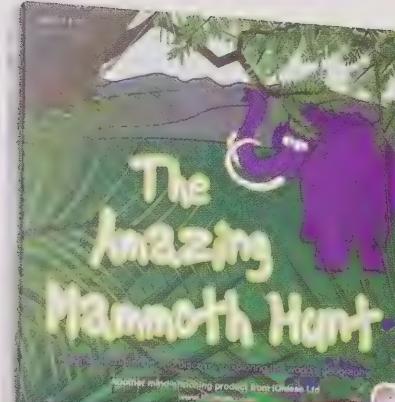
Fabulous last-minute finds

BY DENISE DIAS

**With the hectic holiday season upon us**, finding a thoughtful last-minute gift can be a daunting task. Whether you're shopping for a relative, a friend, or a co-worker, the ROM boutique is the perfect one-stop shop for everyone on your list.

Browse our stock of unique items, including elegant furniture, limited-edition artwork, stationery, jewellery, and eco-friendly clothing. Here are a few ideas to help you spread some cheer this season. o

**DENISE DIAS** manages communications and social media strategies for the ROM Governors Office. She is a regular writer for *Shedoesthecity.com* and *Toronto Life*'s style section.



## "GREEN" PLUSH TOYS

There's nothing like a fuzzy friend to help warm a cold winter's night! These huggable hounds are soft and adorable. Surprisingly, they're also made from 100% recycled plastic bottles. **\$24.99**

**Why we love it!** Each of these toys keeps approximately 10 bottles out of landfills



## BEADWORX DINOSAUR SCULPTURES

These handcrafted works of art are carefully sculpted using flexible wire and colourful beads. Decorative and playful, they serve as multi-functional stocking stuffers. **\$49.99**

**Why we love it!** Each original piece is made by a skilled artisan in rural Southeast Asia



## BIG & BEAUTIFUL BOOKS

Foodies, fashionistas, or film buffs—there's a perfect book for everyone on your list! These glossy editions are gorgeous eye candy and nice additions to any coffee table or bookshelf. **\$35 to \$75**

**Why we love it!** Artistic books specially chosen for the Museum Store come to life when paired with tickets to the ROM to see *Vanity Fair Portraits: Photographs 1913-2008* or *Canadian Content: Portraits by Nigel Dickson*.

All items listed on this page are available at **ROM Museum Store**.

**Store Hours:** 10 am to 6:30 pm, except Friday 10 am to 10 pm.

**Kids Store:** Monday to Sunday Noon to 4 pm. Check out our online boutique at [store.rom.on.ca](http://store.rom.on.ca).

### Special Holiday Hours:

December 26, 2009, to January 3, 2010. The store will be open until 8:30 pm every night except Friday. Kids Store hours remain the same.

## Time traveller

This decorative pocket for holding a pocket watch was one of many beaded objects created in the 19th century by Iroquois artists.



**WHAT AM I?**  
(See bottom of page for answer.)

**HINT!**  
I'm a designer  
and a  
tailor.

## Hot Shot

MyROM: Kids' Photo Contest grand prize winner Christopher Kearney was at the ROM in October for a junior photo internship that was part of his prize (he also took home a new Sony Cyber-shot® W180 digital camera and a one-year family ROM membership). In ROM photographer Brian Boyle's studio, Christopher helped brainstorm how to capture the brilliance of a cubic zirconium and frame the detailed beadwork of a cradle board. He even held a real meteorite.

## ATTENTION EXPLORERS!

The next Explorers' Club event is on Saturday, April 17, 2010, 10 am to 2 pm.

## Fun Facts:

## Behind the Badge

In ancient China, beautifully embroidered badges were worn to signify a person's rank. Badge insignia included cranes or egrets for civil servants and tigers and bears for military officials. The Emperor's badge was embroidered with a five-toed dragon.

## Motor Mouth

The trap jaw ant has the fastest predatory appendage in the animal kingdom—its jaws can reach speeds of 230 km/h.

## Bumper Crop

In Europe during the Middle Ages, many peasants believed that pebbles littering a field actually grew there.

## Once Bitten

Australia's inland taipan has the most toxic venom of any snake. One bite is powerful enough to kill more than 100 people or 250,000 mice.



Artist of gunsmithing who made weapons for Napoleon.

ANSWER: This 19th-century French pocket pistol was made by Nicolas Noel Boutet, a master

# FOR OUR members

The latest offers and information

## NEWS / EVENTS / SUPPORT / PROGRAMS / TRAVEL / SPONSORSHIP



### ROM GOVERNORS' MESSAGE

## A Season of Celebration

### Looking at past achievements and future plans

**During the holiday season**, when everyone is searching for a little warmth and wonder, the ROM is a particularly magical place. It's also a delightful season of celebration in the ROM Governors' office as we reflect on the past year.

In 2009, with your enormous support, Renaissance ROM became the most successful cultural fundraising campaign in Canadian history and transformed the Museum in ways that were beyond our imagination. It's completion is on the horizon and we are eternally grateful to our generous Donors, Patrons, and Members for helping us reach this incredible milestone.

As this triumphant year comes to a close, we are poised to begin an invigorating new phase at the ROM—one that will shape our funding priorities and goals while reinforcing the Museum's status as a programming powerhouse. Over the last several months, we enjoyed a powerful run of programming. *Dead Sea Scrolls: Words that Changed the World*

inspired a compelling series of events, lectures, and debates that investigated the importance of the scrolls from a multi-faith perspective, and the immensely popular ICC exhibition *Vanity Fair Portraits: Photographs 1913–2008* inspired fascinating events and film screenings that explored fame and the evocative allure of celebrity.

Next year is shaping up to be another inventive and interesting one. The iconic Bat Cave is being redesigned as a more exhilarating exhibit that is sure to amaze our youngest visitors, and a series of fun events and programs is planned for March Break.

As a place dedicated to engaging the world and building understanding of world cultures and natural history, we are committed to building bridges between cultures and ages. I am proud and excited to announce the ROM Governors' new priority areas for fundraising: access for all, digital content, education, programming and exhibits, research and collections, and future gallery development.

I want to thank each of you for being part of the ROM family this year. We hope you found the experience to be as educational, engaging, and entertaining as we did. Cheers to the spectacular year ahead!

Happy holidays everyone.

**DR. MARIE BOUNTROGIANNI**  
PRESIDENT AND EXECUTIVE DIRECTOR  
OF THE ROM GOVERNORS

**PS:** To see the ROM Governors' new fundraising priorities case for support and celebratory Renaissance ROM video, please visit [rom.on.ca/support](http://rom.on.ca/support).

THE RENEWED GALLERY  
OF GEMS AND GOLD ROM  
MEMBERS ARE INVITED TO A SPECIAL  
VIEWING OF THIS NEWLY REINSTALLED  
GALLERY ON **FRIDAY, DECEMBER 18,**  
**2009, 10 AM TO 4:30 PM.**

### SNEAK PEEKS

RENOVATED BAT CAVE  
ROM MEMBERS CAN BE AMONG THE  
FIRST TO SEE THE SCARY NEW  
BAT CAVE ON **FEBRUARY 26, 2010,**  
**10 AM TO 4:30 PM.**

### MEMBER INFORMATION

#### MUSEUM MEMBERSHIP RATES

Individual: 1 year \$90; 2 years \$160  
Family/Dual: 1 year \$139; 2 years \$250  
Non-Resident: 1 year \$95; 2 years \$170  
Student: \$50  
Explorers: \$15 (in addition to ROM Membership)  
Curators' Circle: \$175  
Museum Circle: \$300  
Director's Circle: \$600  
Young Patrons' Circle: Single \$600;  
Dual \$1,000  
Royal Patrons' Circle: \$1,500+

#### TELEPHONE NUMBERS

Membership Services: 416.586.5700  
Switchboard: 416.586.8000  
Bell Relay Service: 711  
School Groups: 416.586.5801  
Museum Volunteers: 416.586.5513  
ROM Museum Store: 416.586.5766  
c5 Restaurant/Lounge Members  
Reservation Line: 416.586.8095  
Donations: 416.586.5660

**Attention Members:** Your privacy is important to us. The Royal Ontario Museum (ROM) and the ROM Governors (the ROM's charitable foundation) share a special relationship and you may receive additional information from each. If you do not wish to receive it, contact [membership@rom.on.ca](mailto:membership@rom.on.ca) or call 416.586.5700.

Occasionally, we make our list of supporters available to other carefully screened curatorial organizations and selected groups that may be of interest to you. Please understand that by allowing us to exchange your name, you are helping us support the ROM's education and research mandates. If you prefer not to have your name exchanged, please contact us at [membership@rom.on.ca](mailto:membership@rom.on.ca) or at 416.586.5700.

The ROM Membership Department operates a telemarketing office. Should you prefer not to be contacted by telephone, please call us at the e-mail address or phone number listed below and we will have your number removed from our list.

### Membership/Bookings:

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[rom.on.ca/members](http://rom.on.ca/members)

### ROM BOARDS

**PATRONS** The Right Honourable Michaëlle Jean, C.C. C.M.M. C.D. Governor General of Canada; The Hon. David C. Onley, O. Ont, Lieutenant Governor of Ontario / **BOARD OF TRUSTEES** Sal Badali (**Chair**), Ann Dumyn (**Vice-Chair**), Elyse Allan, Danuta Buczynski, Andrew Faas, Ronald Graham, Paul Haggis, Won Kim, Elsie Lo, Barbara Milstein, Marilyn Pilkington, Colin Saldanha, Barbara Stymsie, Atul Tiwari, Carol Wilding, Judith Wolfson / *Ex-officio* Dr. David Naylor, Jack Petch, William Thorsell / **BOARD OF GOVERNORS** Mr. Robert Farquharson (**Chairman**), Linda Hasenfratz (**Vice-Chair**), Shreyas Ajmera, Dr. Marie Bountrogianni, Rudolph Bratty, G. Raymond Chang, Jack Cockwell, Michael Detlefsen, Gwen Harvey, Jennifer Ivey Bannock, Michael Lee-Chin, Donald R. Lindsay, Rebecca MacDonald, James W. McCutcheon, Dr. Jack M. Mintz, Peter Oliver, Robert E. Pierce, Elizabeth Schad, Simona Schraider, (Joseph) Joey M. Tanenbaum, C.M., James Temerty, C.M., Rita Tsang, Harriet Walker, V. Prem Watsa, Richard S. Wernham, Alfred G. Wirth / **EX-OFFICIO** Jack McOuat, William Thorsell, Salvatore Badali / **HERITAGE GOVERNORS** Jack McOuat (**Chair**), Robert D. Brown, Robert Gillespie, Ned Goodman, Kenneth W. Harrigan, Patricia Harris, Hon. Hal Jackman, Thomas Kierans, Elsie Lo, Susanne Loewen, Stephens B. Lowden, Brenda McCutcheon, Frank Milligan, Dixie-Anne Montgomery, Frank Potter, Wendy Rebanks, Flavia Redelmeier, John A. Rhind, Lynton R. Wilson / **SENIOR STAFF** William Thorsell (**Director and Chief Executive Officer**), Glenn Dobbin (**Deputy Director, Operations, and Secretary to the Board of Trustees**), Mark Engstrom (**Deputy Director, Collections and Research**), Dr. Marie Bountrogianni (**President and Executive Director, Office of the ROM Governors**).

# For Our Members

## NEWS & PROGRAMS



### In Conversation with Meryl Streep

**More than 720 guests** crowded the ROM's Samuel Hall Currelly Gallery on October 7 to hear actor Meryl Streep engage in a candid conversation with *Globe and Mail* film critic Johanna Schneller. The Hollywood icon's thoughts about her own path were surprisingly resonant to anyone with an interest in history: A DNA special she worked on "just confirmed what I already felt," she said. "All that I am is the people who lived before me." Streep seemed surprised by how far-reaching her celebrity is: "When I was in China we flew to Xian where the terra cotta soldiers are [Chinese cultural icons that will be exhibited at the ROM in 2010] and people still recognized me there." Apparently, *Kramer vs. Kramer* really made the rounds in China. To hear the full conversation, go to the podcasts at [rom.on.ca](http://rom.on.ca).

### Attention Members

The **Royal Ontario Museum Act** provides for the election of three Members of the ROM to the Board of Trustees to hold office for a term of three years each. One of these positions will become vacant June 30, 2010. The incumbent, Elsie Lo, has served one three year term as a membership elected trustee and is eligible to stand for a second three year term. The vacant term of office would be July 1, 2010, to June 30, 2013. Nominations for this position supported by the signatures of 25 active ROM members (please include membership number), should be forwarded to reach the Office of the Board Secretary by the close of nominations at noon on Friday, February 12, 2010. If you are interested in pursuing a membership elected Trustee position on the ROM Board of Trustees please call the ROM Board Office at 416.586.5886 for more details.

### SPECIAL HOLIDAY HOURS AND PRICES

From December 26, 2009, to January 3, 2010, the ROM is offering extended hours to 8:30 pm daily, including New Year's Eve and New Year's Day, and half-price admission after 4:30 pm.

### Fact? or Fiction? Keeps Them Guessing



**Held October 22 and hosted by Heather Hiscox of CBC News: Morning**, *Fact? or Fiction?* 2009 was the 13th year of this fundraising event and guessing game. It raised more than \$75,000 for ROM curatorial research. To learn more, visit [rom.on.ca/factorfiction](http://rom.on.ca/factorfiction).

Save the date for *Fact? or Fiction?* 2010: October 21.

*Fact? or Fiction?* 2009 would not have been possible without the generous support of the following:

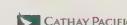
#### Bona fide Presenters:



#### Authentic Patrons:



#### Grand Prize Sponsors:



#### Genuine Supporters:

Acme Pictures Inc., Dynamite Network, Earth Rangers, ICON, Presidential Gourmet Fine Catering, and Torys LLP

### ROM Holiday Gifts

ROM MEMBERSHIP AND ROM MAGAZINE—GIFTS THAT GIVE ALL YEAR LONG

**ROM Members** save up to \$20 on gift memberships. For details, call 416.586.5700 or visit us online. Or for that avid reader on your list, give ROM magazine for just \$17 a year. Call 516.586.5870 or go to [rom.on.ca/rommagazine](http://rom.on.ca/rommagazine).



### Holidays are Family Days at the ROM

**Join us during these special days** when the ROM comes alive with music, activities, and other family fun.

#### **ROM For the Holidays December 26, 2009, to January 3, 2010, 11 am to 4:30 pm**

Animals take over the ROM during the holidays. Kids will love the feature presentation—live animal shows by Earth Rangers, at 11 am, 12:30 pm, and 2 pm daily.

#### **Family Day Weekend February 13 to 15, 2010**

**Theme:** Mesozoic Monsters

#### **March Break March 15 to 19, 2010**

See Let's ROM for more details.



### Winter Weekends Offer

On Saturdays and Sundays from January 9 to February 7, 2010, families can enjoy one free child admission with every paying adult, senior, or student. Go online for details.

### Share the ROM with a Friend

#### SPECIAL OFFER FOR MEMBERS

#### **January 4 to February 12, 2010**

As a special thank you for your continued membership support, we welcome you to bring one guest for half the admission price between January 4 and February 12, 2010.

For details, go to [rom.on.ca/whatson](http://rom.on.ca/whatson).

## ROMTRAVEL

### Following the Fabled Northwest Passage

#### HISTORY AND NATURE HOLD EQUAL APPEAL IN MODERN-DAY ARCTIC EXPLORATION

For hundreds of years, the quest for the Northwest Passage occupied some of the best minds of Western civilization. The desire to find this route motivated much European exploration of both coasts of North America.

One of the most famous expeditions was that of Sir John Franklin, who departed England in 1845 with two Royal Navy vessels and never returned. Eventually, Norwegian explorer Roald Amundsen

conquered the Passage, completing the three-year voyage in his seal-hunting vessel, *Gjøa*, in 1905.

Today, a journey to the Northwest Passage is perhaps the most coveted of Arctic itineraries. There's nature and culture: Western Greenland boasts colourful fishing communities, vast ice fields, and spectacular icebergs while Pond Inlet is a bustling Nunavut community.

And wildlife: Devon Island is home to prolific bird life, and at Lancaster Sound, whales, polar bears, narwhals, and walrus can be spotted.

And of course, history: Beechey Island is the chilling site of the lost Franklin Expedition. Beyond Rae Strait, the final link in the Passage discovered in 1854 by John Rae, are Taloyoak and Gjøa Haven, named by Amundsen during his two winters there.

If you're interested in the frozen north, join ROMtravel for a 15-day journey. We'll meet with residents of Arctic towns and hamlets, see their art, and hear their stories. Ken Lister, ROM assistant curator specializing in the Arctic, Subarctic, and Native watercraft, will be one resource staff on board the 118-passenger *Clipper Adventurer*.

#### ► August 14 – 28, 2010

From \$5,795 USD (depending on cabin selection; flights not included)

For further information, contact ROMtravel at 416.586.8034, e-mail [travel@rom.on.ca](mailto:travel@rom.on.ca) or visit the website [rom.on.ca/programs/rom\\_travel](http://rom.on.ca/programs/rom_travel)



#### Upcoming trips

##### A Berlin Kaleidoscope

May 5 – 15, 2010

##### Churchill, Manitoba

October 30 – November 3, 2010

##### Chicago

September 27 – October 1, 2010

##### Jordan and Israel

October 30 – November 14, 2010

##### Egypt February 2011

Brazil March 2011

Philadelphia May 2011



# FOOD at the ROM

c5  
restaurant // lounge



### c5 Restaurant & Lounge

The cuisine at c5 captures the essence of Toronto's cultural fabric with modern and imaginative dishes. Executive Chef Ted Corrado takes inspiration from the flavours of the city's ethnic markets, fusing them with the fresh qualities of local Ontario ingredients. One of Toronto Life's Top Ten Restaurants for 2008 and 2009.



### Food Studio

Enjoy delicious meals made from the freshest local and seasonal ingredients at Food Studio, the ultimate family destination for healthy menu options in an earth-friendly environment.

### c5c Catering

Ted Corrado and the c5 culinary team offer their unique food philosophy in a ROM gallery setting.

416.586.7928 [www.c5restaurant.ca](http://www.c5restaurant.ca)

c5  
catering

# For Our Members

## SPONSORSHIP

### Microsoft and Bank of Canada Help Get Word Out ABOUT FAKES AND FORGERIES



**In recent years, the forging of artworks** and counterfeiting of all manner of consumer goods has grown exponentially: the worldwide market in fakes is estimated to be nearly 100 times what it was 20 years ago. This is a key message in the ROM-developed exhibition *Fakes and Forgeries: Yesterday and Today*.

It's considered an especially important message by Microsoft Canada, the Canadian subsidiary of the world's largest software company and presenting sponsor of the exhibition. Among Microsoft's goals are creating economic opportunities and jobs and empowering people and businesses throughout the world to realize their full potential. Thanks to Microsoft Canada's support, the exhibition explains the negative impacts that fakes and forgeries have on so many businesses and individuals. The Bank of Canada, the exhibition's education partner, is committed to the safety and efficiency of Canada's financial system, and also issues our bank notes. One small part of that commitment is illustrated in the segment of the exhibition that shows how to identify counterfeit bills. *Fakes and Forgeries: Yesterday and Today* opens in January 2010.

## Microsoft®



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### The Anne Tanenbaum Family's Fidelity to Faith and History

**Throughout the run of the exhibition** *Dead Sea Scrolls: Words that Changed the World*, a comprehensive series of 14 scholarly talks—The Anne Tanenbaum Lecture Series—provided a forum for discussion of topics ranging from "Women in the Dead Sea Scrolls" to "The Scribes of Qumran." The series drew speakers to the ROM from around the globe, including the most renowned scholars on the Bible and the scrolls themselves.

When the Tanenbaum family heard about the ROM's plans to bring the Dead Sea Scrolls to Toronto, they knew supporting this project would be a powerful way to honour the tremendous life and philanthropic legacy of Anne Tanenbaum. In fact, when she passed away in April 2008, Anne Tanenbaum left a provision in her will for the funding of just such a project at the ROM that would enhance Jewish studies. Inspired by a travelling exhibition on Jewish culture, *The Precious Legacy* in 1985, her hope since then had been to inspire the same interest in others. The family decided that a lecture series to accompany the exhibition would be the perfect way to honour their mother. With additional support from Joey and Larry Tanenbaum, the family became the patron of the Anne Tanenbaum Lecture Series. The series was a great success, fulfilling Anne Tanenbaum's legacy in support of greater appreciation of Jewish heritage.



### Taking Youth to Heart

#### ADA SLAIGHT HELPS SUPPORT THE ROM'S SCHOOL VISITS BURSARY PROGRAM

**Established five years ago**, the ROM's School Visits Bursary Program offers students from disadvantaged communities within the Toronto District School Board the opportunity to visit the Museum and participate in an educational program free of charge. One of the most recent supporters of this program is celebrated arts patron Ada Slaight. The program was a natural fit for Mrs. Slaight, who has long had the interests of young people at heart, particularly when it comes to providing



access to arts and culture. Among the many projects she has supported, many of which are scholarships or other initiatives for youth, are Soul Pepper, Canada's National Ballet School, Mistral Foundation, Lorraine Kimsa Theatre for Young People, the National Theatre School in Montreal, and Dixon Hall Music School.

Ada Slaight's generous support in establishing the Ada Slaight School Visits Bursary helps the ROM to meet its goal of increasing accessibility to school children throughout the GTA.

MOVE IN TODAY!

## SUPPORT

### Planting the Seeds of Philanthropy

#### GIVING A GIFT OF YPC MEMBERSHIP

##### In 1984, Dr. Edison J. Quick was serving as a ROM Trustee

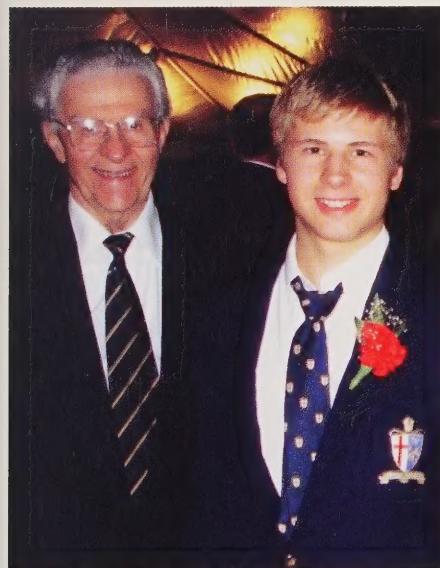
after retiring as Ontario's senior policy advisor to the Ministry of Education. That year, he became one of the founders of a ROM institution—the Royal Patrons' Circle, a group of committed philanthropists who donate annually to support the ROM as it moves into the future. He has been a committed RPC member ever since.

"The ROM is somewhere you can go to see the real thing," says the former educator, a staunch fan of reality. He's so enthusiastic about continuing support for the Museum that each year beginning in 2007, he has purchased Young Patrons' Circle memberships for his grandchildren Theresa, Laura, Alex, and Andrew. "I think it's important that they give to the ROM so that everyone is able to enjoy the wisdom of the ages," he says.

As he hoped, the younger set have become fascinated with the institution that he himself was first drawn to when he saw pictures of it as a child in Leamington, Ontario. "They really enjoy PROM," he says. "There's a collegial aspect when people become committed to a common cause. It's an interesting combination of the intellectual, social, and cultural." And an extra benefit? The cousins have grown close since attending ROM events together. Although some are now studying outside the country, they continue to return to the ROM as their social and cultural centre.

It's a gift that has come full circle for Dr. Quick. "My grandchildren know the young curators and I'm seeing the Museum through their eyes," he says. "And they get me—and their friends—to visit often because they talk up exhibitions like the Dead Sea Scrolls." It's an investment that has paid off handsomely not just for the future of the Museum—but for the Quick family, too.

If you are interested in giving the gift of philanthropy with a YPC or RPC membership, call 416.586.5842 or go to [rom.on.ca/members/ypc](http://rom.on.ca/members/ypc).



Left: Edison J. Quick and Andrew, one of the four grandchildren for whom he purchases Young Patrons' Circle memberships.

## RETIREMENT LIVING WITH A

# Twist



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# Walking with Dignity

How Wayu women negotiated the world in this formal footware

BY ARNI BROWNSTONE



**At the northernmost tip of South America** is a peninsula owned jointly by Venezuela and Colombia called La Guajira. This hot, desert-like region is inhabited by the Wayu, or Guajiro, Indians who lived there long before Europeans first weighed anchor off their coast in 1499. In the 450 years that followed, the Wayu have had many more visitors—some who stayed and others who didn't—and they excelled in assimilating foreign concepts as well as people, without giving up their own cultural identity.

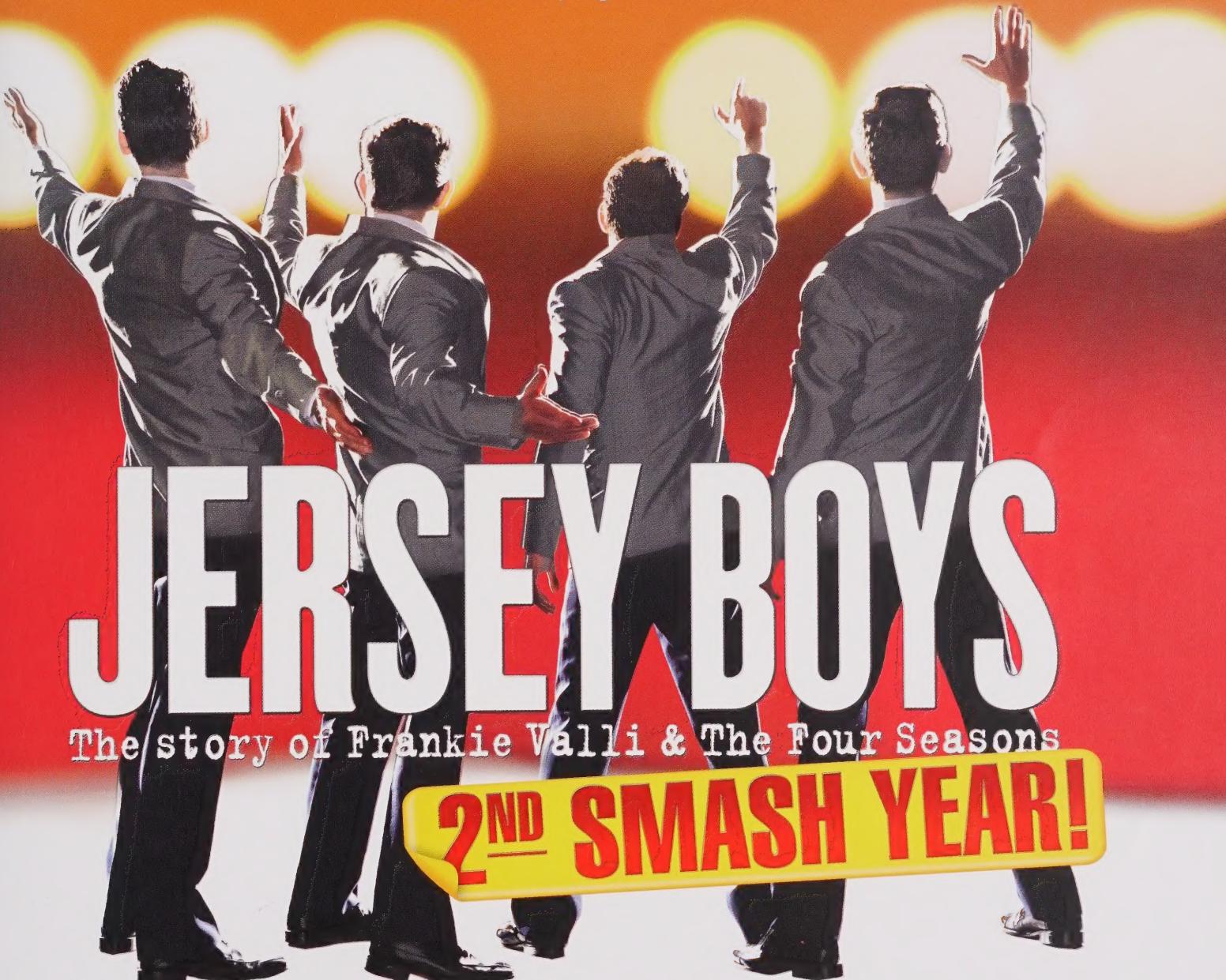
This ability stems largely from the strong role their women play in the culture. By law, children belong to their mother and bear her family's (clan's) name. A woman's place in the Wayu community is aptly represented by these sandals with massive wool pom-poms—the traditional formal footware of Wayu women. That's because, as former curator Helmuth Fuchs noted, "balancing the 6-inch pom-poms between the big and second toe, one cannot help but walk with slow straightforward steps, or, as the Guajiro say, 'walk with dignity as a woman should.'" This pair, collected by Fuchs in 1967, is on display in the ROM's Shreyas and Mina Ajmera Gallery of Africa, the Americas, and Asia-Pacific. o

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ARNI BROWNSTONE is assistant curator of Ethnology in the ROM's Department of World Cultures.

# "JERSEY BOYS remains the champion of the city's musicals!"

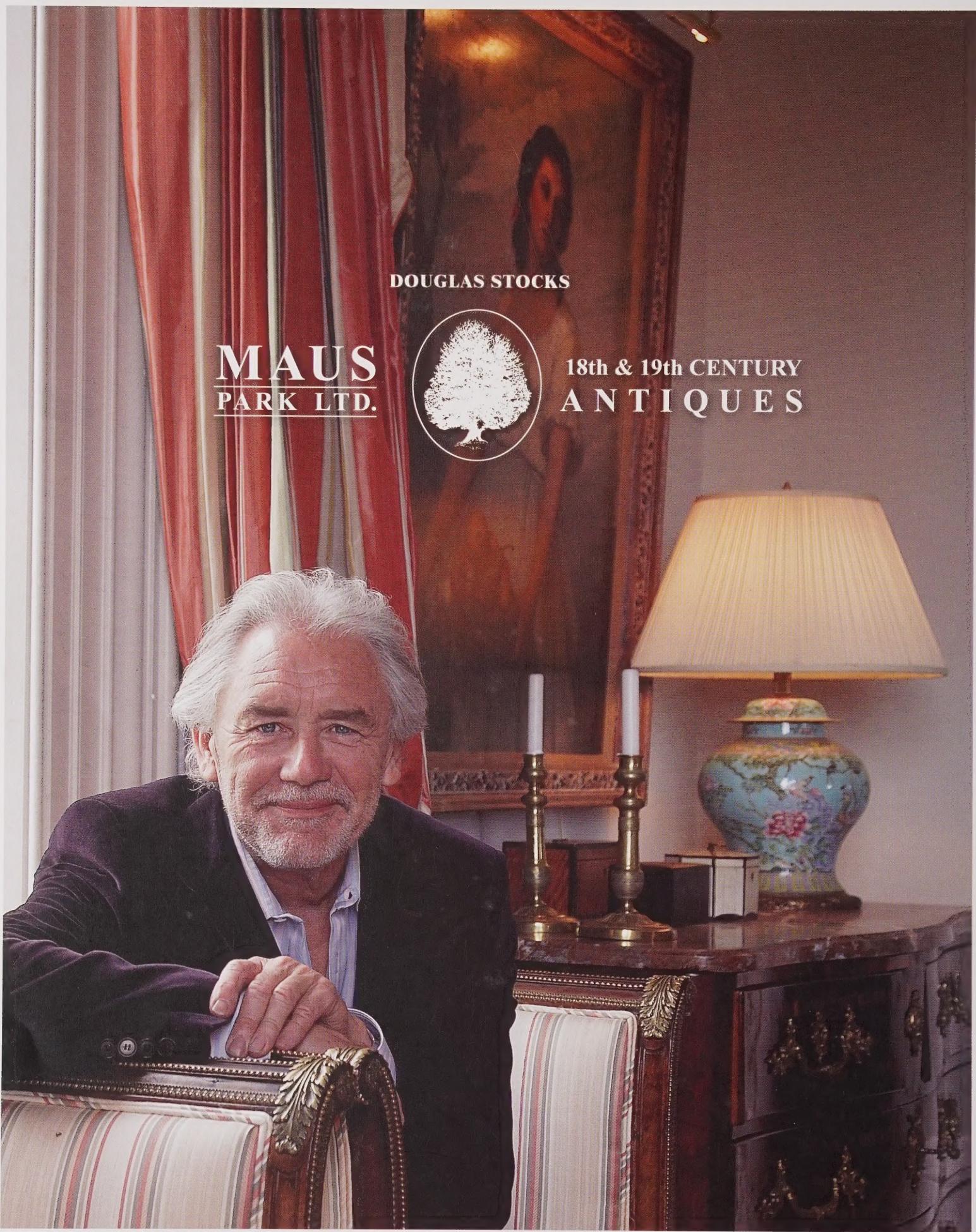
*-Toronto Star, August 2009*



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